A STUDY OF SOME PERSONALITY CORRELATES OF ANDROGYNY AMONG SAINTS AND ARTISTS

A

THESIS

Submitted to

The Saurashtra University

for the Degree of

DOCTOR OF PHILOSOPHY

in

PSYCHOLOGY

BY

MS. ACHINTA YAJNIK

Under the Guidance of

Dr. Gandharva R. Joshi

Department of Psychology

Saurashtra University

Rajkot

MAY - 2007

Registration No. : 2751 Reg. Date : 10th Aug, 2002

DECLARATION

I hereby declare that the work presented in this thesis is original and independent. I further declare that it has not formed, as a whole or in part, the basis for the award of my degree in any other institution or university.

Certified by :

(Dr. G.R. Joshi) (Ms. Achinta Yajnik)

CERTIFICATE

This is to certify that the thesis “A STUDY OF SOME PERSONALITY CORRELATES OF ANDROGYNY AMONG SAINTS AND ARTISTS” submitted by Ms. Achinta Yajnik to Saurashtra University, Rajkot for the degree of Doctor of Philosophy in Psychology is a record of bonafied research work carried out by her under my supervision and guidance for the last four years and eight months. The results embodied in the thesis have not been submitted to any other University or institute for the award of any degree or diploma.

RAJKOT
MAY, 2007

Dr. Gandharva R. Joshi

Department of Psychology
Saurashtra University,
Rajkot
(GUIDE)

ACKNOWLEDGEMENT

Interconnectedness and interdependence is not only the fact of physical reality, as modern physics tells, but it is the hard-core of human existence. No human goal, however small or great it may be, is possible to accomplish without the cooperation of our fellow beings. Academic research, especially of empirical nature as done here, obviously involves support and cooperation of a number of persons. I take this opportunity express my genuine sense of gratitude to all those persons who have directly or indirectly contributed their share, in the shaping of my Ph.D. thesis, as I am submitting hereby.

I express my deep sense of gratitude to my guide Dr. Gandharva Joshi for his timely guidance, constant help, and continuous encouragement from the beginning to the end of the work. He had always been very kind and supportive at every critical stage of research.

I also express my extreme indebtedness to Dr. Chandrakant Bhogayata, retired reader of Education from Bhavnagar university for all his critical, logical and subtle observations on my work, which enhanced the scientific rigor of present research. I am especially thankful to him for guiding on phones for hours together, which enabled the researcher to learn and use SPSSx for the statistical analysis of the data.

I also express my thankfulness to Dr. M. V. Baxi, retired Principal and Head of the Department of Psychology, L .N. C. Mehta College, for enlightening comments and feedback given on the Theoretical part of the thesis.

I specially express my gratitude to Br. Satyakrishnaji, who guided in collecting the data of saints from the caves of Himalayas at Gangotri. He introduced the researcher to Buddhist monasteries at Himachal Pradesh. Thus credit for the qualitative depth and range of data collection goes to his instrumentality only.

I thank genuinely all my subjects- all artists and saints and also normals-for giving their precious time in answering truly, honestly and patiently my, a bit long, questionnaire.

I thank University Grants Commission for sanctioning my Teacher Fellowship under the Faculty Improvement Program of the x^{th} Plan of UGC for completing my Ph.D. But for this fellowship, the researcher, as a working woman, would have not thought at all, of completing her PH.D. in time. I thank my Principal, my University, my Management, and Gujarat Government for cooperating in getting me this fellowship.

My thanks also go to Mr. Mitul and Mr. Darshan of Print Valley printers for rendering their computer services that enhanced the aesthetic image of thesis. Transforming tables from SPSSx to Microsoft word and then editing each table, as done by Mr. Mitul, was

quite lengthy and tiresome work, which deserves my genuine gratitude.

I thank my younger sister, Ms. Dyuti Yajnik, for thoroughly standing by me at every stage of my research. I thank my friend Urmi Ajabia for her moral support and assistance in data collection of artists. I also thank my student Rupal Shah and Prof. Hafiz in assisting me my computational work.

Above all, I am greatly indebted to my devoted family members whose support and encouragement have always been a constant source of inspiration to me.

Once again my genuine thanks to all who have contributed in one or the other way, and helped me in completing my research project.

Date: **Ms. Achinta Yajnik**

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THEORETICAL BACKGROUND
PART-1 FEMINISM AND ANDROGYNY

NEED FOR ANALYZING THE THEORETICAL FOUNDATION OF ANDROGYNY

Compartmentalism, objective observation, the Cartesian approach of analysis of the parts of the object, total determinism, complete objectivism and reductionism are the characteristics of scientific methodology. It under lied the mechanistic world-view of Newtonian Science. This methodological paradigm of science, based on mechanism, reductionism, and Cartesian dualism, has led to the specializations of subjects. Scientific study of any subject matter means the in-depth analysis of any single 'part' of that subject matter through objective observation. However, when the depth is reached in any part-analysis of science, we inevitably find its interconnectedness, which makes interdisciplinary analysis inevitable, especially in 20th century science. This is how, in recent years, it has been widely recognized that deep knowledge and analysis of any subject matter necessitates the analysis of that subject in all its interdisciplinary aspects. Therefore in contemporary pedantry, the contours among natural sciences, life sciences, social sciences and environmental sciences have been in "fluid". There are no clear cut-off points between sciences. This being so, the concept of 'androgyny' which is the main topic of present research, is also

analyzed here at multidisciplinary levels to clarify its theoretical foundation as a prerequisite of empirical research.

NEED FOR THEORY AND THEORETICAL ANALYSIS:

Any empirical research does not get its full meaning and significance without its theoretical basis. Theoretical analysis before any empirical investigation is necessary not only from the purely scientific- and knowledge-point-of-view, but also for its practical and cultural applications and utility to mankind. As Shotter (1975) says,

"Theoretically the aim of any science is to describe the unity of its subject-matter. We cannot be content with merely accumulating in our journals an indefinitely long list of the empirical traits of man. The upshot of all this is that perhaps in no other age than ours, has man become, such a mystery to himself. To possess a wealth of facts is not necessarily to have a richness of understanding. The explosion in our knowledge has resulted in an ever-expending array of disconnected and fragmented data lacking all conceptual unity.... Unless we can find a way of connecting all these scattered facts together, we shall remain buried under the debris of our own investigations.... This fragmentation in our knowledge of ourselves is not merely a theoretical problem, it poses threat to our whole ethical and cultural life." (Shotter J. 1975:15)

Thus any empirical research has to answer some theoretical questions and to know such questions, theoretical analysis of the research topic becomes necessary. As an article published in the journal- "Psychological Review" (Oct.1988) of APA- says, 'the view-point that the goal of scientific inquiry is research progress and that

theory is at best, an essential aid to research progress; at worst, an impediment to research progress, reverses the appropriate relationship between theory and research. The primary role of basic scientific inquiry is to provide an understanding of the phenomena under consideration. Theories are the basis of such understanding in that they are explanations for how or why particular phenomena occur and for how they are related to other phenomena. Thus, rather than piling up 'facts' about the nature of reality, the primary goal of basic science is to develop increasingly useful theories regarding the phenomena of interest. Research should, therefore, be a tool for facilitating the progress of theory, not the other way round,' quoting Sechrest (1986) further, it is said that 'research is a method for testing theoretical propositions—to do work simply for its own sake is a futile exercise in non-productivity." (Oct. 1988).

Thus, the goal of any empirical research should be to enhance the theoretical understanding of particular subject, rather than creating a heap of findings for its own sake.

Secondly, as Newcomb says, "It is well-formulated theory which guides at each of the 'choice points' of empirical research." (Newcomb T. M. 1953:1)

Thirdly, as ICSSR Survey of Research in Psychology (1980) says,

"In so large and fragmented an area as behavior dynamics, research often proceeds from theoretical formulations, however, tentative the framework may be. This view is, of course, not new but it became major criterion only about the fifteen years back for the

publication of research reports in psychological journals of international repute." (Udai Pareek 1980:4)

Thus, to clarify the theoretical framework before conducting good empirical research is the pedagogical practice for the scientific writing in the reputed international journals.

Fourthly, any science has four goals: (1) Description, (2) Explanation, (3) Prediction, and (4) Control. First two goals are concerned more with the 'pure' aspect of science and the latter are concerned more with the 'applied' aspects, though both are complementary and inter-dependent. The 'applied' goal of 'control' is impossible without the goal of 'prediction' i.e. one cannot control the phenomena which have not been predicted. Again the goal of 'prediction' becomes possible only from the 'explanation' part and this 'explanation' constitutes the Theory-Formation.

If we analyze in the context of present research, we can say that theoretical background and theoretical analysis of Androgyny can only make possible the proper explanation of observed data and that can only lead to the predictions for further empirical research. As Bhaskar (1984) says,

"The individuals as well as societies have levels of existence, levels of existence beyond what lies on surface, beyond what we can see." (Bhaskar quoted from Craib, 1984) Explanation of the observed facts in the light of this 'ontological depth', as Bhaskar terms, is especially significant, if not inevitable, to make social science studies more meaningful including the present study on Androgyny.

Fifthly, under the triumph of scientism, based on inductive methodology, objective observation as the prerequisite of scientific

methodology was over-emphasized. But as recent developments of science and the psychology of perception tells, pure objective observation without any presupposed theoretical framework is impossible. A more recent approach in perceptual theories is of that of 'Top-down' rather than 'Bottom-up' approach. According to these "Active", "Top down" theories of perception, perception is not just 'passive' reception of the input from stimuli. Many Top-down mental processes, cognitive processes play their part, not only at the final stage of interpretation but it also affects the actual 'Seeing' itself. According to this 'Top-down Active' approach to perception, as Hanson and R. L. Gregory propound, even the simplest perceptions are not purely objective, all our perceptions are 'theory-laden'. Gregory has expressed this idea in his concept of 'perceptual hypotheses' with a support of number of empirical facts. Hanson has also argued that "perception is more than what meets with the eye ball'.

Thus, even the simplest perceptions are believed to be theory laden. 'Theory-dependence' of observation has also been found in 20th century atomic physics, revolutionized by Einstein's Relativity Theory, Plank's Quantum Theory, Heisenberg's uncertainty principle etc. Thus all empirical research underlies some theoretical presupposition, which need to be clarified before proceeding empirical investigation.

Finally, the 20th century philosophers of Science like Karl Popper in his theory of 'Falsification, Thomas Kuhn in his analysis of 'Structure of Scientific Revolution and Paradigm Shift', Lakatos in his theory of 'Cultural Relativism' of even scientific knowledge,

Feyeraband in his propounding of 'Anarchy of knowledge'—all have argued against the pure objectivity of perception. All these philosophers of science have argued that it is the theory, which precedes the observation, and not vice versa as the naïve inductivists claim.

All the above stated arguments suffice to suggest that theoretical analysis is the prerequisite of any empirical research. This being so, concept of 'androgyny' which is the main topic of the present research has also been analyzed here at multidisciplinary levels by way of clarifying its theoretical foundation.

Interdisciplinary Analysis of Androgyny:

The theoretical analysis of androgyny as discussed here involves the sociological theories of feminism, linguistic turn given to feminist thought through post-modernism and the operational measurement of Androgyny in psychology. The logical and theoretical interconnectedness of sociology, linguistic theories, and the psychology leads to the concept of Psychological Androgyny, upon which present research focuses. So the whole theoretical analysis of 'Androgyny' has been discussed here under following titles:

1. Feminism and Androgyny (Sociology)
2. Post-modernism, Deconstruction, and Androgyny (Linguistics)
3. Androgyny in Psychology. (Psychology)

1. Feminism and Androgyny: (Sociological Theories)

Before discussing the feminist discourse it is important to distinguish between the two terms, Sex and Gender, and Bisexuality, which underlie the feminist thinking. As glossary of Feminist theory defines, “Bi-sexuality” is the term used in a variety of ways, but three main meanings can be discerned. Firstly, in a Darwinian thought, bisexuality represents biological concept referring to the presence of male and female characteristics in an organism. Secondly, it refers to the coexistence in the human psyche of feminine and masculine characteristics. Thirdly, it describes an individual’s love or desire for persons of both sexes. (Andermahr S. et al. 2000: 22)

Here, the term ‘bisexuality’ will be used only in Darwinian sense. The first meaning of bi-sexuality in Darwinian sense refers to the concept of Sex. Biological distinctions between male and female are referred to as Sex-differences. Thus although bisexuality is a biological fact, i.e. though biological sex differences are natural, during the course of cultural evolution and due to the changes in socio-economic and cultural conditions, these sex-differences led to the creation of ‘gender’ differences.

Actually this distinction of Sex and Gender, formulated by Robert Stoller (1968), was adopted by the early second wave of feminists to differentiate the socio-cultural meanings of ‘masculinity’ and ‘feminity’ from the base of biological sex differences of 'male’ and ‘female’ on which these distinctions were erected (Oakley, 1972).

In short, biological differences between man and woman are referred to as ‘sex differences’. These sex differences refer to the differences of body involving hormonal, anatomical, and

chromosomal differences between males and females. While 'gender differences' involve the psychological differences of traits and temperamental personality differences and also sex-role differentiation which is primarily the products of particular socialization within a given culture. Thus, gender differences have deeper roots in socio-cultural conditioning than in biology.

However, as Mary Vetterling-Braggin (1982) says, 'virtually all sex difference theorists distinguish between sex and gender and also affirm some link between Sex and Gender. The difference between Sex and Gender has been nicely 'deconstructed' in following passage:

"Within lesbian context, the identification with masculinity (gender) that appears as butch identify (gender) is not a simple assimilation of lesbianism (sex, sexuality). As one lesbian Femme (sex and gender) explained, she likes her boys (gender) to be girls (sex), meaning that 'being a girl (sex) contextualizes and resignifies 'masculinity' (gender, or here, 'being a boy') in a butch identify. As a result, that masculinity (gender), if that can be called, is always brought into relief against a culturally intelligible (gender) 'female body' (sex) (Butler 1990: 123).'

In short, biological differences of bodies of man and woman are referred to as Sex differences, and the psychological, personality and sex-role differences between man and woman are called Gender differences. Sex differences are denoted normally by terms "male" or "female"; while Gender differences are denoted normally by the terms 'masculine' or 'feminine' or by 'masculinity' or 'feminity'.

As stated earlier, sex differences led to gender differences during the course of cultural evolution. Williams J.H. says that this differential gender role socialization derives primarily from the long history of division of labor along sex lines, which was necessitated by the biological and socio-economic facts of life. (Williams J. H. 1981:19) Such differentiation culminated into hierarchy structure of power relations where man was considered to be superior and woman to be inferior. This led to domination of man and the oppression of woman. And as the attempts to emancipate women from oppression various women lib movements and feminisms emerged.

Definition and Meaning of Feminism:

Sushila Singh says that the word 'feminism' has picked up so much connotations of late that it seems to have no precise meaning and what it stands for may be easily misunderstood (Singh S. 1997:22). According to Donna Hawxhurst and Sue Morrow (1984), feminism has only working definitions because it is a dynamic, constantly changing ideology with many aspects including the personal, political and the philosophical (Singh S. 1997:23). Thus, the universal and precise definition of feminism is difficult to achieve. However, most agreed and widely accepted aspects of feminism are as under as suggested by different authors:

* Feminism is intended to mean only that there are excellent reasons for thinking that 'women suffer from systematic social injustice

because of their sex'. This proposition is to be regarded as the essence of feminism. (quoted from Singh S. : 22).

* Feminism is a movement which seeks the reorganization of the world upon a basis of sex equality in all human relations, a movement which would reject every differentiation between individuals upon the ground of sex, would abolish all sex privileges and sex burdens and would strike to set up the recognition of common humanity of woman and man as the foundation of law and custom (Feminist dictionary, 158)

* Feminism aims to dismantle all 'systems of domination'.

* Feminism is minimally the term which implies the identification of women as systematically oppressed, the belief that *GENDER* relations are neither inscribed in natural *DIFFERENCES* between the sexes nor immutable and a political commitment to their transformation (Andermahr S. et al. 2000:93)

To summarize, we can say that feminism accepts the fact of systematic social injustice of women because of their sex and it aims to emancipate women from all types of oppressions.

TYPES OF FEMINISM*:*

Historically, different types of feminisms have evolved, differing in their analysis of the causes of oppression and ways to emancipation. In contemporary post-structuralist feminist discourse,

various feminisms are classified according to their theoretical positions into two groups:

1. Feminism of Equality (First wave of Feminism)—(Thesis)
2. Feminism of Difference (Second wave Feminism)—(Antithesis)

1. FEMINISM OF EQUALITY: (First wave of Feminism):

Feminism of equality is one, which aspires to achieve legal, political, social, economic equality between the two sexes for women's emancipation. Liberal feminism of late eighteenth and nineteenth centuries in Europe grounded in the liberal philosophies of Locke, Bentham and John Stuart Mill who argued for equal rights, individualism, liberty and justice — is called the "Feminism of Equality". Liberal Feminism, i.e. Feminism of Equality has been also termed as the 'First wave of Feminism".

John Stuart Mill, in his book "Subjection of Women" (1869) strongly argued for women's right to enter any profession or art and especially he strongly pleaded for women's right to vote. Mill's commitment for women's right was so strong that he left half of his fortune for women's education. Mill formed 'women's suffrage society' in England and persuaded many influential women to join. However, as Sushila Singh puts, 'the credit for an organized movement for women's rights goes to America beginning with the Seneca Falls Declaration of Sentiments and Resolution drawn and signed at the obscure village Seneca Falls, New York in the summer of 1848'. The convention argued to acknowledge the right of American women to elective franchise. A final clause to the resolution was added...urging men and women to work for professional and vocational equality…

During the next 72 years the quest for suffrage was found to be the one strong bond uniting three generations of women who believed with Elizabeth Candy Stanton (Pioneer of this historic event of Seneca Falls) that only through the exercise of the franchise, would they eradicate the existing legal, economic and social inequalities affecting women...Only after the passing of the Nineteenth Amendment in 1920, the document acquired historic value and became an inspiring symbol of the feminist movement"(Singh S. 1997:18).This, women's right to vote, constituted the first and founding achievement of the feminist movement.

In short, winning the legal, civil, and political rights of women and thereby to achieve equality between two sexes was the motto of Liberal Feminism. As A Glossary of Feminist Dictionary puts "Liberal feminism in the US has been associated with the movements such as NOW (New Opportunities for Women) and the ill-fated Equal Rights Amendment (ERA) campaign. In Britain it promoted the legislation of the 1970s 'for equal pay and an end to sex discrimination…'
(Andermahr S. et al 2000:149).

It is important to note here that Mill's 'Subjection of Women' and 'a Vindication of the Rights of Women' by Mary Wollstonecraft (1982) – these two works have contributed significantly in the Liberal Rights tradition of Feminism.

2. FEMINISMS OF DIFFERENCE: (Second wave of Feminism):

The second wave of feminism, after 1960s, is termed as "Feminism of Difference".' The period from 1920 to 1960, as Sushila Singh says, is known as the period of intermission in the history of women's rights movement when a sense of complacency prevailed. The reality belied the sense of so-called victory on the issue of suffrage and new Feminist Movement started in 1960s" (Singh S. 1997:19). This new feminist movement, as the Second wave of Feminism, differed from the 19th century First wave Feminism in two respects:

First wave Feminism accepted the biological, natural and resultant psychological differences between the two sexes; however, as they argued, these natural differences do not justify the oppression and deprivation of equal rights and opportunities to women, while Second wave of Feminism gave far more emphasis on socialization and culture rather than on biology in gendering of individuals. According to Second wave of Feminism, the observed differences between the two sexes are rooted more in social and cultural conditioning. Society and culture has sharpened and magnified the sex differences.

In First wave of Feminism, we find that Gender differences were reduced to Sex differences and yet equality was aspired as social justice, while in Second wave of Feminism, we find more and more withering away of sex differences and greater emphasis on gender differences as result of culture. Not only that but we also find

Second wave of Feminism going up to the extent of reducing even sex differences to gender differences through its peculiar analysis of the concept of ‘body’.

First wave of Feminism tacitly assumes the basic, essential, biological, natural, given differences of two sexes and yet aspires for equality. So it is accused of ‘Saming’, making women same as like men, while Second wave of Feminism, although goes up to the extent that even so-called biological differences are also mediated by social interactions and language, it emphasizes the difference between the two sexes, it rejects ‘Saming’ and emphasizes Woman-specificity. In other words, First wave of Feminism assumes the ‘difference' and aspires equality and Saming, while the Second wave of Feminism, in their attempt to reduce even sex differences, tacitly assumes “Saming” and they aspire and emphasize ‘difference’ and ‘women specificity’.

Evolutes (variants) of feminism of difference:

It is rightly said that 'distinctions between feminisms are not hard and fast. The lines between various types of feminisms ‘cross and re-cross'. This statement is truer for the Feminisms of Second wave. Following are the main types or evolutes of the Second wave Feminism of Difference:

1. Classical and Structuralist Marxist Feminism
2. Radical feminism
3. Cultural feminism
4. Corporeal Feminism

1. CLASSICAL AND STRUCTURALIST MARXIST FEMINISM:

As Coward says “Marxism had a constant engagement with feminism” (Coward 1983:130). However, Marx has not distinguished specific gender issue in his analysis of class society. Marxism is the ideology, which has always been revisionistic since its inception to post-modern era. This being so, Marxist position on feminist issue has also been evolving. Here, the Marxist view of Feminism has been discussed in two parts:

1. Classical Marxist Feminism.
2. Althusser’s Structuralist Marxist view of Feminism.

1 .CLASSICAL MARXIST FEMINISM:

According to Classical Marxist view of Feminism, women’s oppression is due to their conservative role in family, which has excluded them from their economic participation in ‘public’ production. According to this view, capitalism and male supremacy strengthen each other. Women oppression is ultimately a problem of class society only. The small class of people, which owns the means of production, exploits the majority class who are compelled to sell their labor for survival, and this small class of owners is males. So, women have to fight from double angle, for economic as well as gender equality. As Engles writes, “The first condition for the liberation of wife is to bring the whole female sex back into public industry”. (Engles 1984:66)

On the basis of this Classical Marxist view of Feminism, combining it with Althusser’s concept of family as an aspect of ‘ideological state apparatus’ (Althusser’s view to be discussed later),

Christine Delphy (1984) developed a concept of 'sex class' which recognizes Marxist 'class' relations between men and women. Delphy views family enterprise as a 'domestic mode of production' in which male householders exploit and profit from women's domestic, unpaid labor of housework, child care and, in certain cases, direct production work too without pay, like wives' contribution in managing husband's hotels or pubs.

In short, Classical Marxists Feminists see women's oppression as a function of family system and of a larger capitalist socio-economic system. Women's economic participation and economic independence is the only solution to women emancipation.

2. ALTHUSSER'S STRUCTURALIST MARXIST FEMINISM:

Though Classical Marxist view of Feminism assumes implicitly sex differences, it shares with First wave Feminism in aspiring for economic equality of women. But the revival in Marxist thought influenced by Althusser, constitutes the Second wave of Feminism, the Feminism of Difference, where differences between the sexes are ascribed more to ideology than to biology.

Louis Althusser's Structuralist Marxism of 1970s, brought gender ideology into the same category of 'class' and race. Sonya Andermahr et al say that 'the concept of ideology, as it circulates in Marxist theory is perhaps the most problematic and least well developed, but has been one which feminists have leant on most heavily in theorizing Patriarchy. Michele Barrett (1991) identifies no fewer than six distinct uses of the term (ideology) licensed by various textual differences within Marx, Marxists or their commentators and

finally defines ideology as that which “connotes ideas and beliefs which are in some sense distorted, they fall short on EPISTEMOLOGICAL grounds and are motivated by Class Interests (Andermahr S. et al. 2000: 127)

For feminists, gender ideology or patriarchy is such ideology, which, though lack sound epistemological ground, is inscribed in our day-to-day practice. Patriarchal or gender ideology is understood as a cultural ordering in which gender differences present themselves as utterly natural, founded upon biologically given differences of sex. Girls and boys are socialized to enact and thereby to reproduce this hierarchical order” (Ibid 2000:127). In short, according to the Structuralist Marxism of Althusser, like class distinctions, gender differences are also rooted in ideology, i.e. in social and cultural ordering, underlying class interests of males. For Althusser, there is no subject except in and through ideology. Ideology produces individual subjectivities. Through ideology, subject occupies her position in a society within the parameters of class, gender, and race.

Althusser distinguished between knowledge and ideology and said that the former is concerned with ‘ideas’ and are produced through specific practice, while ideology is concerned with ‘the lived’ and is inscribed in our day-to-day practices and therefore taken for granted as unremarkable, natural. This, taken for granted, natural and unnoticeable aspect of ideology-which determines even our subjection, has also been pointed out by Pierre Bourdieu through his concept of “doxa”. According to him “doxa” refers to taken-for-granted naturalized assumptions and beliefs of a given field of practice. As A Glossary of Feminist Dictionary says “doxa has

resemblance to Gramsci's 'common sense' and it differs from ideology in that it is largely below the level of consciousness yet not unconscious in Freudian sense"(Sonya A. et al. 2000:71). Doxa is, as Bourdieu says, embedded even in the bodily "hexis" (which means postures, gestures, disposition of standing, speaking, walking etc. in a typical male or female way) and "habitus" (structured dispositions) of individuals. Habitus is laid down in the contexts of family, class and neighborhood and revealed in shared habits, posture, everyday likes and dislikes, propensities to act and react in certain way, and above all, in the dispositions of the body itself, bodily 'hexis'.

Thus, using Althusser's terminology, we can say that gender differences and even gender identity or subjectivity is structured through ideology, which is a, taken-for-granted, 'unconscious', socio-cultural phenomenon. Using Bourdien's terminology, we can that gendering of people is socio-culturally constructed through "doxa", quite without our conscious notice or deliberation and it engraves even our gender specific hexis and habitus.

Additionally, it is relevant here to point out that according to Slavoj Zizek (1994), doxa only becomes ideology at the point where in response to challenges to its 'naturalness', it articulates and defends itself as orthodoxy. Thus, 'naturalness' of ideology leads to its defense when challenged or attacked on 'epistemological ground' as it happens in case of gender ideology.

Following Hegel, Zizek distinguishes the Doctrine, Belief and Ritual, e.g. as he says, liberation was a doctrine developed from Locke to Hayek; it was materialized in Rituals and apparatuses like

elections, free press etc. and active in the 'spontaneous' experience of individual subjects as 'free'. It is at this last experiential level, where ideology can be considered.

As said in A Glossary of Feminist Theory,

"For Althusser as for Gramsci and Bourdieu and for Althusserian-influenced feminists, this last level of 'the lived' is the most potent locus of ideology. It is but a small step, however, from the proposition that ideology, where it is effective, is 'lived' inscribed in practice to the more radical proposition that whatever is lived is 'ideological'. It is this double proposition which Althusser wishes us to accept and which makes ideology ubiquitous, inevitable and part of the very air we breathe'.

Though such a broad concept of ideology has been criticized by post-structuralism; in present feminist context it can be summarized that revival of Marxism by Althusser constituted the Second wave of Feminism, which recognized the gender differences to be ideology-driven or further doxa-driven.

2. RADICAL FEMINISM:

It is said that it was Radical Feminism that gave the Second Wave of the Women's Movements in North America and Europe its cutting edge in the late 1960s and early 1970s (Andermahr S. et al. 2000: 222). In public imagination also 'women libbers' or 'feminists' are associated with this Radical Feminist thought and politics. Almost every emergent feminism since late 1960s is affected by Radical Feminist thinking. Socialist Feminism, French Feminism of Irigaray and Helen Cixous which combined the Radical Feminism with

Lacanian Psychoanalysis, Corporeal Feminism of Elizabeth Grosz and Moira Gatens and the Chief Successor of Radical Feminism known as Cultural Feminism, Lesbian Feminism and Critique of 'Compulsory Heterosexuality'- all these influential feminisms after late 1960s are directly or indirectly derived from the Radical Feminism.

Radical Feminism has been articulated by such writers as Tigrace Atkinson, Shulamith Firestone and Kate Millet. Though Radical Feminism first gave birth to Second wave Feminism of Difference, whose basic contention was that the differences between the sexes, are the products of socio-cultural conditionings rather than of biology, it is the Radical Feminism itself which gives much emphasis on biological differences and considers these biological differences only to be the ultimate causes of women's oppression. Thus, apparently Radical Feminism seems to be regressing to conservatism in its emphasis on biology. However, the very 'Radical' aspect of Radical Feminism against conservatism is that according to them, these biological differences are not immutable and inevitable; they can even be manipulated through technology. So through revolution in biotechnology, even the fundamental inequality of bearing and rearing children can also is abolished and so the whole family system and 'sex roles' as such be abolished. Thus, in its optimism of overcoming even the biological gap between the sexes through technology, Radical Feminism justifies its name.

Second striking contention of Radical Feminism is that according to it, all other types of oppressions like those of racism and class society are ultimately rooted in sexism, which, in turn, is rooted in biology. So the battle against Capitalism and against racism is

subsidiary to the more fundamental struggle against sexism (Sushila Singh 1997:30). Radical Feminists locate the *root cause* of women's oppression in patriarchal gender relations, as opposed to legal systems (liberal feminism) or class conflict (socialist feminism and Marxist feminism)(http://www.en.wikipedia.org/wiki/Radical_feminism)

" All political classes grew out of the male-female role system, were modeled on it and are rationalized by it…because the male-female system is primary, the freedom of every individual depends on the Freeing of every individual from every aspect of male-female system" (Koedt, Levine and Rappone 1974:370). In short, the basic tenets of Radical feminism can be summarized as under:

* that women are oppressed as women and their oppressors are men;

* that the whole gender order as such is socially constructed and has no basis in natural differences between the sexes. That is why, the political goal articulated by the New York Feminist Manifesto was "*the annihilation of sex roles"*.

* that the male oppression has primacy over all other oppressions.

Finally, it is very important here to note that though Radical Feminism emphasizes biological differences as the roots of not only sexism, but also of racism and class society, it is not at all 'essentialist, because against the essentialist position, Radical Feminism aspires for technological manipulation of biology. Thus, Radical Feminism is 'Social Constructionist' only and that is why it has been labeled as the 'Feminism of Differences'.

3. CULTURAL FEMINISM:

Cultural feminism has been coined as the 'Chief Successor of Radical Feminism". According to Cultural Feminism, the natural differences between the sexes are not of much significance; only culture has magnified and sharpened these differences. The differences are cultural and psychic rather than natural and inevitable. Though Cultural Feminism emphasizes role of culture in magnifying gender differences, it glorifies women specificity, by asserting that not only man and woman are different biologically, but women are superior. In emphasizing women specificity or 'women culture', Cultural Feminism underlies essentialism. As Wikipedia defines,

"**Cultural feminism** is the ideology of a female nature or female essence reappropriated by feminists themselves in an effort to revalidate undervalued female attributes. (Alcoff, 1988). It's the theory that there are fundamental personality and psychological differences between men and women, and that women's differences are not only unique, but superior. This theory of feminism takes note of the biological differences between men and women - such as *menstruation* and *childbirth* - and extrapolates from this the idea of an inherent "women's culture." For example, the belief that "women are kinder and gentler than men," prompts cultural feminists' call for an infusion of women's culture into the male-dominated world, which would presumably result in less violence and fewer wars. At its core, the theory ascribes to a form of gendered *essentialism*. Cultural feminism seeks to improve the relationship between the sexes and often cultures at large by celebrating women's special qualities, ways, and experiences, often believing that the "woman's way" is the better

way, or that the culture discussed is overly masculine and requires balance from feminine perspectives. (Thus) Cultural feminism is a form of difference feminism."

Cultural Feminism also commends the positive aspects of what is seen as the female character or feminine personality. It is also a *feminist theory* of difference that praises the positive aspect of women. Early theorists like *Jane Addams* and *Charlotte Perkins Gilman* argued that in governing the state, cooperation, caring, and nonviolence in the settlement of conflicts, society needs women's virtues. (Ritzer, 2006)
(http://www.en.wikipedia.org/wiki/Cultural_feminism)

While Radical Feminist position was that biological differences are not inevitable because they can be manipulated by technology, the Cultural Feminist position is that biological differences are not inevitable because even they are mediated by the psychic processes and the social interactions of baby and mother. Thus, even biological differences too ultimately belong to the realm of culture. Simon de Bourvier's famous statement that "one is not born woman, but becomes woman" is the basic contention of Cultural Feminism. Only biology does not give womanhood, culture gives womanhood. As a Glossary of Feminist Dictionary puts 'natural' body is enculturated and 'culture' is inscribed in the very dispositions and habits of the flesh (Andermahr S. et al. 2000: 51)

Secondly, Radical Feminists believed that sexism was at the root of racism and class conflict. While Cultural Feminists believe that race, class, ethnicity, and nationality together with sex distinctions construct gender differences. Masculinity and Feminity are

constructed not only on the basis of sex and not parallel to race, class, ethnicity, and nationality; but in and through these and other distinctions. To say more loosely, Radical Feminism brought sexism in racism and class conflict, while Cultural Feminism brought race, class etc into sexism. Elizabeth Spelman nicely puts this Cultural feminist position as under:

"Are we to assume that his (Black male child's) maleness will be recognized by his mother, his father, his sister, himself and every one else as something separable from his blackness" (Spelman 1990:99) Thus, to minimize the effects of the biological and to maximize the responsibility of socio-cultural aspect is the goal of Cultural feminism.

Another most important and distinctive aspect of Cultural Feminism is that although they ascribe gender differences and to a certain extent, sex differences also to culture on the one hand, on the other hand, they glorify distinctive women qualities and say that women have distinctive culture, 'women's culture'.

Within this specificity of 'women's culture', not only corporealities of female body but also psychological, moral, spiritual and linguistic specificities of women, as emphasized by different thinkers are also included. Following are the examples of various theoretical positions of different thinkers, which are consistent to the Cutural Feminist emphasis on Women Specifiity:

* Cultural feminism itself celebrates motherhood and highlights positive images of maternal body.

* Corporeal Feminism—an extension of Cultural Feminism only- is founded upon female corporealities only.

* Nancy Chodorow's "The Reproduction of Mothering" and the "Object Relations Theory" derived from Klein's modified psychoanalytic theory—both emphasize the importance of mother-child relationship, which was much neglected in Freudian psychoanalysis through its focus on Castration principle and Oedipus complex.

* Freud depicted women to have weaker super-ego and hence less sense of justice and hence weak morality. Carol Gilligan (1982) in her critique of Lawrence Kohlberg's work, argued that women do have moral reasoning, but it is guided by different ethics of care and responsibility for others, while man's moral reasoning is guided by sense of justice as recognized by Kohlberg. Thus, Gilligan's critique implies women specificity in moral reasoning.

* Julia Kristeva's analysis on the symbolic meaning of maternal body and her concept of "semiotic" implying child's prelinguistic connection with maternal body also include women's' culture.

* French Feminists, Irigaray and Cixous, attempted to formulate a separate Feminine "Imaginary" which, in Lacanian psychoanalysis, refers to the child's 'mirror stage' without its separate subjectivity from mother prior to the 'symbolic order' of language. Cixous posits Imaginary as women's spiritual and linguistic home, while Irigarary challenges the monolithic law of the father and argues for the possibility of separate, Female-specific Imaginary and symbolic realms.

* Lesbian feminism too emphasizes Female Specificity, Female attributes and values ostensibly shared by women and aims to create separate autonomous women's culture against the dominant culture.

Thus all the above cited approaches and the like, in their emphasis on one or the other aspects of women specificity, are included in 'women culture' and are thought to be supporting Cultural Feminism. However, main charge against Cultural Feminist idea of 'women's culture' is about its authenticity, because 'can we ever distinguish 'woman's own voice' (Gilligan 1982) from Patriarchal ventriloquisms (Irigaray 1974)? "Probably not" as Sonya Andermahr et.al. al. put (2000:290). As she says, "Gramsci's concept of ideology recognized very clearly the manner in which positive elements of working class culture are 'gathered up' and reworked within the DOMINANT IDEOLOGY and the task of distinguishing the 'authentic' from "inauthentic' would be a thankless one". The same logic of Gramsci applies to the idea of creating woman-specific culture without traces of patriarchy.

According to Segal, Cultural Feminism is often charged with essentialism and/or biological reductionism. Even Wikipedia depicts Cultural feminism as ascribing a sort of gendered Essentialism as quoted earlier. (http://en.wikipedia.org/wiki/Cultural_feminism). In establishing distinctive women's culture, underlying distinctive women qualities leads to biological reductionism, because essential woman qualities ultimately turn out to be biological.

Thus, as a feminism of difference, Cultural Feminism believes gender and even sex differences to be culturally constructed and in emphasizing distinctive culture, it turns out to be essentialist. In this context, Diana Fuss rightly argues, "…The very staking out of a pure anti-essentialist position simply reinscribes inescapable essentialist logic." (Sonya A. et.al.2000:) '…many women disagree with cultural

feminism, because they do not relate to the kind of essentialised 'woman' that some of its proponents seek to promote. The dilemma facing feminist theorists today is that our self-definition is stuck in a concept that we must deconstruct and de-essentialise in all of its aspects. Cultural feminists today believe that the traditional realm of women provides the bases for the articulation of a humane world-view, one, which can operate to change the destructive masculine ideologies that govern the public world. However, contemporary feminists do not believe that this transformation will happen automatically, they do not believe that the differences between women and men are principally biological. (Donovan, 2000)' In short, though propounding the Difference, in its emphasis on Women Specificity, Cultural Feminism is charged of also being essentialist, which is not acceptable to many feminists according to whom anti-essentialism is the very basis for feminist concern. (Wikipedia)

4. CORPOREAL FEMINISM:

With the advent of "Second wave of Feminism", gradually sex-differences were reduced to gender differences, which in turn were reduced to socio-cultural phenomena. This, move can be termed as "reductionalism in anti-direction". In conservative view, sex differences were considered to be basic and natural upon which gender differences were built, while with constantly growing feminist awareness and with Second wave of Feminism, gender started enchroaching even upon biology itself. According to Cultural Feminism, the 'body' itself gets meaning through child's interaction

with society. This, peculiar analysis of “body” is further elaborated by “Corporeal Feminism”.

Corporeal Feminism emphasizes the corporealities of woman body. Female body and its corporealities like menstruation, pregnancy, reproduction etc. have been considered both as a root of women’s oppression and also as a source of specific women power. According to Schor and Weeds (1994), those who celebrate the female body as a source of power affirming women’s corporeality positively in its differences from that of men and valorizing its reproductive capacities, run the risk of being “Othered” as radically and essentially different from men.

In this context, Narayan (1989) rightly says that in male-dominated socio-cultural worlds, every affirmation of female difference is likely to be used to further disadvantage women. . Thus, in both the ways female body and its corporealities prove to be source of women oppression. However, French feminist Luce Irigarary (1974) argues that ‘maternal body’ constitutes feminine corporeal specificity without its male counterpart to generate “Othering” but because Western Philosophical tradition has been “phallocentric” (patriarchal), it can not recognize the maternal other in its difference from male, which has monopolized the position of subject.

Another important aspect of Corporeal Feminism is that it dissolves mind-body distinction with a unique concept of body which has not only physical but linguistic and socio cultural “anchors” too. As a Glossary of Feminist Dictionary says,

"From the 1980s there has been a virtual 'resurrection of the body' in social and philosophical theory. This has its base in those POST-STRUCTURALIST AND PHENOMENOLOGIST philosophies, which claim Nietzsche in their GENEALOGIES—Foucault, Lacan, Merleau-Ponty and many others. The starting point of these "wayward philosophies (Grosz, 1994), is a refusal of the mind/body dichotomy which has dominated Western thought and its dissolution in a concept of subjectivity which is irreducibly corporeal. These writers focus upon the human infant's lack of viability, its early dependence, its incomplete state as a biological entity until it enters into LANGUAGE and CULTURE and begins to become socially as well as physically viable. It is the body of the infant, in its interaction with others, particularly those who care for it physically, which is the basis for the formation of subjectivity and IDENTITY. Social and sexual and psychic identities are inscribed in and on the body and not in opposition to it in some other mental space." (Andermahr S. et al. 2000:25)

It is important to note here that this dissolution of mind-body distinction in post-structuralist philosophies, is not coming just to Materialistic Monism. To use Popper's terminology, we can say that in this virtual resurrection of body though mind as world-2 entity is denied but the body to which it has been reduced is not a just world-1 entity; 'body' in this 'wayward philosophies' is the intersection of world-1 and world-3 (which includes language, ideologies etc). The sense in which, Popper's world-1 and world-3 are real, in the same sense, here the poststructuralist subjectivity is said to be 'corporeal' in above-cited paragraph.

In its emphasis upon female specificities and difference, Corporeal Feminism is also charged of essentialism just like Cultural Feminism. Posing the problem of 'Saming' and 'Othering', Naomi Schor says, "if Othering involves attributing to the objectified other a difference that serves to legitimate her difference, Saming derives the objectified other, the right to her difference."(Andermahr S. et al. 2000: 48).

Just as in the case of Essentialism vs. Social Constructionism discussed earlier, Diana Fuss has rightly pointed out that it is difficult to see how Constructionism can be Constructionism without a fundamental dependency of essentialism. Similarly, difficulty arises with the problem of 'Saming' and 'Othering', not only in case of sexism but also with racism and class differentiations too. According to Schor those who are othered always face this dilemma. If difference is denied by those who are thus othered, then this denial runs the risk of 'Saming' (women are exactly like men, Black people are just like White) the trap into which Schor claims, Simon de Beauvoir falls.

On the other hand, if identity is affirmed in terms of difference, which is experienced as a significant one, then the risk is of being 'othered' once more defined by an essential difference. Schor argues that it is this risk, which Irigarary takes in her female specific emphasis on maternal body. Toril Moi (1985) too charged Irigarary of essentialism. In short, Corporeal Feminism, being Feminism of Difference is charged of not escaping essentialism.

Attempting to answer this dilemma Sonya Andermahr et. al. say that this equation of 'equality' with the same has been challenged

both inside and outside post-structuralist feminism. The post-structuralist historian Joan Scott argues that the antithesis itself hides the interdependence of the two terms. For equality is not the elimination of difference and difference does not preclude equality. (1990:138) (Ibid 2000:81).

Secondly, in the 1980s "Black Feminism" or "women of color" emerged which criticized the dominant feminist discourse to be representing only White, Western middle-class standpoint, marginalizing the Black women who were positioned elsewhere in society and culture. Thirdly, lesbian feminism criticized dominant feminist theory and praxis to be heterosexual.

All these developments shifted the debate of equality vs. difference from difference between the sexes to the difference within the sexes. Fourthly, the second wave of feminism of difference culminating into emphasis on specificity of women culture also got challenged in the light of the recognition that the meaning of 'being a woman' is not independent of her other positioning in class, race and sexuality (Spelman, 1990). Black feminism also rendered inapplicable any single axis theory about racism and sexism as identified by Crenshaw in the concept of 'intersectionality' (Smith V. 1990:272)

All these developments during and after 1980s, critical about the dominant feminist discourse itself gave rise to "Third Phase of Feminism" influenced by post structuralism and postmodernism. According to Julia Kristeva this third phase of feminism constitutes the 'synthesis' stage of thesis (First wave, equality-based feminism) and antithesis (second wave, difference-based feminism). This third phase constitutes contributions from "Traveling Theory".

Traveling Theory means “like people and schools of criticism, ideas and theory travel-from person to person, from situation to situation, from one period to another…(not only that but it is) to some extent transformed by its new uses, its new position in a new time and place” (Said 1983:226-227 quoted from Solanki K. 1999: 92-94.).

In contemporary thought, major traveling theories include those of Karl Marx, Autonio Gramsci, Raymond Williams, Michel Foucault, Jacques Derrida, Jacques Lacan, Ronald Barthes and many others. Especially newer traveling theory by late 1980s emanating from France (Derrida, Lacan, Irigaray, Cixous) had much influenced feminist thought. These theories were rooted in structuralist and post-structuralist theories of language, which gave linguistic turn to social-cultural feminist thought. If we analyze the evolution of feminist thinking, we find a move from equality to difference, from biology to culture. This first move is a “cultural turn”. Then in third synthesizing phase, influenced by Traveling Theory, we find “linguistic turn” and turn to Textuality where attention has been drawn to the role of Text, language, and discourses in creating meaning. Thus we find gradual withering away of sex into gender, culture and finally in language respectively.

In this third, postmodern, synthetic phase with the linguistic turn to feminist thought following three approaches are main:

1. Derrida’s Deconstruction.
2. Lacan’s Psychoanalysis.
3. French Feminisms of Irigarary and Cixous

2. Postmodernism, Deconstruction, and Androgyny:(Linguistics)

As stated earlier, "Traveling Theory" emanating from France has much influenced the feminist thought of third phase with linguistic turn. Derrida's Deconstruction is one of such theories.

Derrida's Deconstruction is a poststructuralist philosophy. Before analyzing its post structural aspects, it is important to understand its predecessor theories of structuralism of 1960s and its predecessor structural functionalism.

1. STRUCTURALISM:

As a Dictionary of Modern Critical Terms (2003) explains, "Structuralism—is to be understood at two levels of generality: First as a broad intellectual movement, one of the most significant ways of theorizing in the human science in the twentieth century, second as a particular set of approaches to literature. The basic premise of structuralism is that human activity and its products, even perception and thought itself, are *constructed* and not *natural*" (Fowler Roger 2003)

Thus the basic tenet of structuralism seems to underline the Cartesian method of Compartmentalism, i.e. of analyzing any subject into parts and then study the parts. It is this Cartesian approach of analysis only, upon which the whole edifice of science has been erected.

However, the Compartmentalism and analytical approach of physical sciences and the structuralist approach of analysis in social sciences and humanities differ in that the former underlined purely mechanistic and deterministic assumption, while the later though

does not allow room for human agency, it is not purely mechanical but a somewhat teleological. The teleological aspect of structuralism does not refer to any ontological aspect but it emphasizes the meaning evoked from the interconnection of parts. As the above-cited dictionary further clarifies, according to structuralism, “a structure...is not merely an insignificantly mechanical ordering. Each element in the structure has meaning in the Saussearian sense of ‘value’ because it has been selected from a system of other possibilities." (Fowler R. 2003: 232).

In short, according to structuralism any structure is composed of parts or elements and each element has got meaning or ‘value’ by the fact of being related to other.

2. STRUCTURAL FUNCTIONALISM:

Before structuralism of 1960s, structural functionalism prevailed according to which any structure is constituted of parts, which are interconnected. Similarly, society is also a structure or human ‘construction’ band it is also constituted of interconnected parts, which are constantly reproduced in similar or modified form over time. This theory is called “structural functionalism”. Structuralism of 1960s is a successor theory of structural functionalism.

As pointed out by A Glossary of Feminist Theory, structuralism agreed with structural functionalism in following three aspects: (1) both were objectivist-laying claim to rigorous scientific status. (2) Both had explanatory models, which drew on the opposition between depth and surface with underlying structures exercising determining

causality over the phenomenal social world. (3) Neither had much place for human agency.

However, structuralism differed from structural functionalism in that structuralism was rebuilt upon the linguistic model of Saussure according to which society is constructed, not like a building as structural functionalists believed, but like a language or sentence. The structure of language upon which the social philosophy of structuralism rests is the Saussurean one. So, it is apt to understand Saussure's linguistic model.

3. SAUSSER'S LINGUISTIC MODEL:

The most basic concept of Sausser's linguistic model is the 'sign'. The Greek word for 'sign' is 'semeion' from which the word 'semiotics' came which means a study of signs. American philosopher Pierce C.S. has identified three types of signs:

- *The icon*: Where the sign resembles its referent.
- *The index:* Where the sign is associated with its referent.
- *The symbol:* Where the sign has an arbitrary relation to its referent.

It is this last type of signs having arbitrary relationships to their referents which has been propounded by Saussure in his book "Course in General Linguistics" which became the foundation for modern semiotics. According to Saussure, all words are the 'symbols', i.e. the signs having arbitrary relation to their referents. As Saussure analyses, sign has two parts:

- *The signifier:* Which is the sound image of word or sign, word as spoken or written.

- *The signified:* Which refers to the concept evolved by the sound image

According to Saussure, the words or sound images have arbitrary relationship with their referents. Thus, meaning of the sign is derived from its difference from other sign, 'lion' means lion because it phonemically differs from elephant, tiger etc. So, relation of difference is the secret of meaning. So to say in Saussure's terminology, the sign gets its 'value' or meaning by being different to the other 'sign'.

According to Saussure, the words or sound images have arbitrary relationship with their referents. To say by illustration, why the word 'lion' means animal lion only and not anything else? Why the word "mango" is not used for animal lion? Why the lion cannot be named 'mango'? Saussure says that there is no rational ground for that. There is absolutely arbitrary relationship between the signfier (word) and the signified (concept). The signifiers and the signifieds are only conventionally and arbitrarily connected. Thus, meanings do not come from nature or God, but are absolutely arbitrary and man-made.

This was the radical view of meaning proposed by Saussure. Saussure argues that the very fact that the same object of the world has different words in different languages suggests that the relation between the word and its referent is absolutely arbitrary which later on becomes conventional.

Saussure further says that not only relation between words and things is arbitrary, but the meaning of the word also does not come from things. The meaning of the sign is derived not from its referent

or things in the world but through its 'difference' from other signs within the system of language only. According to him, new words take their place among the existing words because they are different.

As Bertens puts it 'A change in the signifier, no matter how minimal, means a new signified. (Bertens H. 2001: 58). Thus, according to Saussure meanings are bound up with the process of differentiation within the language only. A sign's meaning, i.e. its signified is not an object in the real world, as we tend to think. Thus, Saussure rejects the correspondence theory of language whereby each word or sign refers to a thing in the world. Saussure argues that the meaning of sign is derived "not from the external referent or thing in the world but through its "difference" from other things. As Saussure says "in language there are only differences and no positive terms...signs are the products of a system of differences; indeed they are not positive entities at all, but effects of differences" (quoted from Solanki K 1999:92,94).

This is the radical view of meaning, advocated by Saussure. As explained nicely by Bertens, the simple word 'tree' means, as American Heritage College Dictionary (3rd Edn) defines 'a perennial woody plant having a main trunk and usually a distinct crown'. This definition does not refer to any single object in the real world, but to a category of objects, which may or may not have 'distinct crowns'. The meaning of the sign 'tree' includes Oaks, beeches, and chestnuts but also dwarf pines and Douglas Pits. Its 'signified' is a human category, a concept. All signs refer to concepts, though not unrelated to real world, but clearly they are the products of generalization and abstraction. It is these concepts that we then apply in our actual use

of language to the real world. So which of the two is dominant? Does the real world determine the meanings of language or language determines our world? Saussure opts for the second one and argues that our language in fact constitutes our reality.

To say in terms of psychology, the concepts are formed through process of abstraction or generalization and the process of discrimination. However, this discrimination process talked in psychology is the discrimination among real objects of the words. So the psychological theory of concept formation considers world to be more fundamental. However, according to Gregory's concept of 'perpetual hypotheses', even our simplest perceptions are guided by top-down mental and cognitive processes. We form the hypotheses first and then check against the real world while perceiving. Gregory's this active theory of perception reinforces Saussure's radical position of linguistic determinism.

In short, to use Saussure's terminology, the sign gets its 'value' or meaning by being a part of the system in which it differs from other signs and thereby gets its identity. As the "A_Z Guide to Modern Literary and Cultural Theorists" explains, this Saussurean structure of language is used to explain the social and cultural phenomena.

According to structuralist cultural theory, society and/or culture are also constructed or man-made. Culture is also constituted of many interconnected parts. Countless discrete elements together make up a culture. Like language culture is also a system of signs. Culture constitutes a sign system like eating customs, taboos of various kinds, rites, rituals, customs, rules governing relationship etc. In short, everything that is constructed man-made in culture and is

not biologically determined counts as a sign. These cultural signs also drew their meanings from their difference with other signs. Just as difference between the linguistic-sign and its real-world referent is arbitrary, the relationship between the cultural sign and its referent is also arbitrary, determined by convention.

Finally, just as language underlies binary oppositions, culture also underlies binary oppositions of light/darkness, noise/silence, clothed/naked, sacred/profane, man/woman etc. However, Strauss distinguishes between the oppositions made by nature and oppositions made by culture. Just parole are the manifestations of langue, culture reflects nature. However, over time the nature may appear contrary in cultural acts. As Bertens puts, 'Cultural signs position themselves somewhere on a gliding scale between pairs of opposites and in so doing express a relation between two terms, one of which represents a presence, while other represents an absence"(Bertens 2001:63-64).

The feminist implications of structuralism is that sex differences, though are natural, gender differences are man-made, cultural. The studies of Margarret Mead clearly substantiate the contention that gender differences are not 'essential'. So, gender stereotypes do not get their meaning from their biological referents. Like all signs, the terms 'masculinity' and 'feminity' also get their meanings not from their real word referent but from their differences with other signs within language only. So gender differences are also ultimately rooted in language. Michel Foucault rightly says in this context that ' there occurred a shift within the social sciences and humanities from things to words. (Andermahr S. et al. 2000)

Thus, when the reality is said to be constructed by language according to Saussurean Structuralism, the gender differences also get linguistic base. As A Glossary Feminist Theory says, 'Second wave of feminism, i.e. feminism of difference emerged when structuralism was having greatest influence.' And it is the structuralism based on Saussure's linguistics, which finally gave the linguistic turn to feminist thought in its third phase.

4. DERRIDA'S DECONSTRUCTION AS POST STRUCTURALISM:

Derrida's Deconstruction as a poststructuralist thought goes one step further in its linguistic analysis. Deriving from Saussure, Derrida also says that language is constituted of sets of binary oppositions. He further says that not only language in general but writing of Western thought too, is structured on a series of binary oppositions like langue/parole, signifier/signified, synchronic/diachronic, analysis/synthesis, man/woman, nature/culture, speech/writing etc. Derrida says that if we analyze the writing of Western thought, we always find such binary oppositions, and in each case one term is privileged to the other, due to which hierarchy of authority is established, e.g. speech is thought to be superior than writing, man as superior to woman etc. Thus, Saussure pointed out the binary aspect of language, but the hierarchical relationship between the two terms of binary pairs, is pointed out by Derrida.

Deconstruction is the method of subverting the hierarchy of opposition. As Dr. Baxi explains, "Deconstruction, according to Derrida comprises the following steps:

* The first step of deconstruction consists in identifying certain opposition (i.e. speech/writing, nature/culture, signified/signifier etc.) and showing that one of the terms of the opposition is treated as dominant over the other due to which the opposition is hierarchical.

* The second step consists of subverting the opposition by showing that the privilege of one term over the other cannot be maintained. This is because the term that is treated as secondary and which is marginalized, suppressed and excluded, is itself required for properly conceptualizing the first term.

* The third step of deconstruction involves the sabotaging of the conceptual opposition (Parker 1989, P.59). This step involves displacing a conceptual order. The system governing the hierarchical opposition can no more reassert itself. The opposition is seen in a new context. Even a new category is applied to include the opposition in a different context. For example, Derrida uses a new term 'arche-writing' to include both speech and writing (Baxi M. V. 1993-94:12-13.)

To explain the deconstruction by illustration - e.g. let us identify the binary opposition of light/darkness as expressed in some writing. Here light seems to be privileged term. But the concept of light becomes impossible without the concept of darkness. If there were no darkness and only light around, we would not be aware of light, in other words, we would not have the concept of light. Thus, it is the marginalized term darkness, which creates the concept of privileged term-light. This is called 'decentering' of the privileged term to show that both terms only exist because of difference. Thus, like structuralists, Derrida also contends that meanings of signs are

derived not from their referents but from their difference from other signs. As Derrida says:

"The signified concept is never present in and of itself, in a sufficient presence that would refer only to itself. Essentially and lawfully, every concept is inscribed in a chain or in a system within which it refers to the other, to other concepts (Derrida [1982] 1996:30 quoted from Bertens 2001:32)"

Thus, deconstruction leads us to both/and positions of binary opposition, instead of either/or as traditionally believed. As Bertens puts it, "Instead of opposites that could not be further apart, we find two terms that are deeply implicated in each other. In the deconstruction of binary opposition either/or gives way to both/and". However, structuralists talked about only the difference of one sign from the other, for emergence of meaning. But Derrida says that not only difference but *"differance"* implying temporal distance between the words, particular succession of words also plays its role in emergence and ever change of meaning. As Bertens puts it:

"…Since words are not determined by their relationship with what they refer to, they are always subject to change…words never achieve stability, not only because they are related to, and take part of their meaning from, the words that have just preceded them, but also because of their meaning is always modified by whatever follows. The word that is next to the word we are looking at, or a word later in the same sentence, or even paragraph, will subtly change its meaning. Meaning, then is product of difference and it is also always subject to a process of deferral. In fact, a word's -or sign's- relations to other words and to words that will follow are a *condition* for

meaning-without those relations, meaning would not be possible. As Derrida puts it:

“The movement of signification is possible only if each so-called ‘present’ element, each element appearing on the scene of presence, is related to something other than itself, thereby keeping within itself the mark of the past element, and already letting itself be vitiated by mark of its relation to the future element, this trace being related no less to what is called the future than to what is called the past, and constituting what is called the present by means of this very relation to what it is not."(Derrida [1982] 1996:32)”.

Thus, Derrida’s idea of difference, giving meaning to signs, includes both “spacing” and “temporization”, the idea of difference and the process of deferral meaning.

According to Derrida, because the meanings of words are produced through difference, that meaning is neither stable (because of difference) nor pure. The meaning of a sign or word is always contaminated by the ‘traces’ of the other signs.

e.g. think of a traffic light, we all know the meanings of red, yellow, and green. But these meanings are never pure. In other context, ‘red’ gives meaning of ‘stop’ conveying the traces of yellow and green within it, it is not pure, unadulterated red. All the three lights—red, yellow and green together constitute a differential structure and it is the structure including green and yellow –that gives red its meaning. (Bertens H.2001: 124). Derrida argues that similarly every word contains the traces may be from ‘spacing’ and/or temporization through difference and differance.

Finally, three terms in Derrida's Deconstruction need to be mentioned. Logocentrism, Phonocentrism, and Metaphysics of Presence. Derrida denounces all these three concepts. As Dr. Baxi puts, 'Derrida finds that Western thought from Plato to Austin is governed by Phonocentrism, Logocentrism and Metaphysics of Presence. Phonocentrism and Logocentrism privilege speech over writing, because in a spoken word (phoneme), thought (logos) is 'immediately and transparently present.' Derrida undercuts speech/writing hierarchy showing that meaning is not a matter of immediate presence because it is a function of differential structure of language, a system of contrasts and differences which can never be present fully at any given moment. The metaphysics presence underlying speech/writing hierarchy is thus undermined (Baxi M.V 1993-94, 19). As pointed out earlier meaning is always contaminated by the 'traces" of past and future through process of 'spacing' and 'temporization'. Secondly, according to Derrida, there is nothing 'prior to' or 'outside' language which itself is instable, never fully present. Thus, Logocentrism, Phonocentrism, and Metaphysics of Presence are denounced.

To summarize, Derrida's Deconstruction constitutes poststructuralist thought. Structuralism and post structuralism are common in their strident anti-humanism, their displacement of human subject and influence of structural linguistic via Lacanian psychoanalysis in formation of gender identity and gender differences. Both structuralism and post structuralism differ also on some epistemological emphasis, but here in the context of feminism, common aspects are more important.

As Derrida's deconstruction and Lacan's psychoanalysis, both constitute poststructuralist thought it would be more appropriate to discuss first Lacan's psychoanalysis and its criticism by French feminists and then discuss the feminist implications of post structuralism in general, and Derrida's deconstruction in particular having special implications for the concept of 'Androgyny' which is the main topic of present research. So, we now discuss Lacan's psychoanalysis and French Feminism as critique of Lacan.

5. Lacan's Psychoanalysis:

As a poststructuralist thought, Lacanian Psychoanalysis too displaces human subject as center by demonstrating the production of subject through linguistic and symbolic differences. Like Derrida Lacan (1977) also challenges the notion of 'centralized' subject as embodied in rationalist philosophy and humanism. Lacan also challenges the concept of autonomous ego of traditional psychology. As "The A_Z Guide to Modern Literary and Cultural Theorists" puts,

"The Cartesian Cogito, the "I" which in thinking is conscious of its being and the humanist self, the integral individual, do not, Lacan argues compose a pre-existent, unified, whole or autonomous subject, the expressive and interior center of the human being. Ex-centric, the subject of Lacanian Psychoanalysis, is an effect of unconscious processes and desires articulated in language"(Sim Stuart, 1995: 249 quoted from Andermahr S. et al. 2000).

According to Freud, Oedipus complex is the fundamental structure responsible for the formation of the sexual identity of the child. But, unlike Freud, Lacan says that this Oedipus complex is not

given and biologically cast. It is the product of the 'symbolic' order, i.e. of language. That is, Lacan does not use the word 'penis' but uses the word 'phallus'.

Lacan distinguishes between the Real, the 'Symbolic Order', and the 'Imaginary'. The symbolic represents the order of language, which makes child's entry into subjectivity, into the realm of speech, law, and sociability. Before child's entry into symbolic, the child is in imaginary stage where there is no other, no sense of limitations and boundaries. As Sushila Singh says, 'the imaginary signifies mother dyad, which the symbolic interrupts through the agency of the parental function- the name of the father rather than the biological father per se.' Through this shift from father to Name of the Father, Lacan denaturalizes Freud's theory of subject constitution by opening it up to the play of language, symbol, and metaphor (Singh S. 58). In short, imaginary stage refers to pre-Oedipal stage before castration principle and language or the symbolic operates. It is a stage before the child grows as speaking subject. Identification of mother and sense of unity characterizes imaginary.

The concept of 'loss' is central in Lacanian Psychoanalysis according to which when the infant loses a primary object of 'mother' as presence, then symbols enters the field of language and the infant becomes a speaking subject. Entry into language requires that the infant takes up a 'subject position' through difference and Othering and thereby acquires gender identity. According to the psychoanalytic principle this process is governed by the Law of the Father, symbolized by phallus. According to Lacan, women identified with the

imaginary figure of mother, represent loss and lack and hence cannot be symbolic signifier.

In short, as a poststructuralist thought, Lacanian Psychoanalysis roots the constitution of gender identity and subjectivity in language only. But, according to Lacan, this language is phallocentric, which has been the main point of feminist criticism. The symbolic realms, in Lacanian Psychoanalysis are theorized in masculine terms as a result of which women are conceived as defective males.

Thus, though, Lacan gives gender identity purely a linguistic base and thereby tries to remove biological essentialism underlying sexism, even the symbolic is not free from male supremacy as French Feminist Luce Irigarary says.

6. FRENCH FEMINISM: LUCE IRIGARARY AND CIXOUS:

Criticizing Lacan's symbolic as being phallocentric, Luce Irigaray (1977) (psychoanalyst); a French feminist emphasizes the mother-child relationship of Imaginary stage of pre-symbolic order. She says that psychoanalysis, Western Metaphysics, and Western culture reveal patriarchial structure only. Freud's account of psychic development is in fact a single sex model where Feminity is seen in relation to the male model as lack, absence, and negativity. Similarly, Lacan's account is also exclusively masculine. The separation effected by the perception of difference from the unified stage of Imaginary which is the pre-requisite for entry into symbolic is an exclusively masculine perception. According to Irigaray, as the "A_Z Guide to Modern Literary and Cultural theorists" puts, 'Lacan's

concept of the imaginary is of a masculine imaginary, his symbolic a masculine symbolic.

The primacy of the phallus of a *masculine* imaginary, is not, however, central only to Lacanian theory; it underlies the whole of the Western symbolic and social order. In it, women have no identity as *women.*" (Sim Stuart 1995:219 quoted from Andermahr S. et al. 2000)

According to Irigaray, even Derrida's Deconstruction of this structure of this binary opposition is not enough. To Irigaray, what is needed is not even the deconstruction of privileged 'male' term but a specifically *female* imaginary and *female* symbolic with structures corresponding to the morphology of the female body. Helene Cixous (1977) has also, in her own style, emphasized feminine writing, feminine symbolic, and female creativity.

Thus, Irigaray and Cixous, in their emphasis on creating Specific Feminine Symbolic are moving back from gender-neutrality stemming from deconstruction to the feminism of difference. Both these feminists seem nearer to corporeal feminism of second wave with their emphasis on women specificity.

Secondly, the proposition of Irigaray and Cixous of creating feminine symbolic order has also been criticized as utopian.

Thirdly, Cameron (1985) rejects the very contention that language can be phallocentric. She argues that language per se cannot be ascribed to masculinity and that as woman clearly do use language, it makes more sense to analyze language use in terms of asymmetric power relationships.

Against the criticism of French Feminists as having utopian ideas, recently more sympathetic attention has been given to these French Feminist critiques. In particular, Rosi Braidotti has argued that a feminism of sexual difference is essential, both theoretically and practically, if the specificity of the feminist project is not to be lost in the face of postmodernism's disembodying of sexual difference in a 'new' anti-essentialist subject"(Sim Stuart, 1995: 221, quoted from Andermahr S. et al. 2000).

However, researcher believes that if we put aside gender specific feminist project and think of the larger good of humanity as a whole, then the linguistic and anti-essentialist turn of postmodernism in general and deconstruction in particular, leading towards 'androgyny' are more conducive to the emanicipatory interests of mankind in general and in particular of even women too. When the history of feminist thought has already lead us to the disembodiment of sexual differences by rooting them in language and thereby disembodying the essentialist subject as such, we should not stick to women–specific feminist concern to keep the issue burned. This postmodern, anti-essentialist and linguistic base of gender identity does take care of the emancipatory interests of women through gender-neutrality. So Braidotti's argument of maintaining anyhow the sexual difference is not necessary.

Not only theoretical development of feminist thought into postmodern gender-neutrality, but practically also the development of feminists actvists also focus on "Gender-mainstreaming," where the 'either/or' dichotomy of sexual difference is diverted now towards 'both' the sexes. The whole discourse on Gender Discrimination has

evolved from various types of Feminisms to the concept of "Gender Mainstreaming" which was established as a global strategy for promoting Equality in the Platform For Action, adopted at the United Nations Fourth Conference on Women, held in Beijing (China) in 1995. In July 1997, the United Nations Economic and Social Council (ECOSOC) defined the concept of "Gender Mainstreaming" as follows,

"Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels. It is a strategy for making the concerns and experiences of women as well as of men an integral part of the design, implementation, monitoring and evaluation of policies and programs in all political, economic, and societal spheres, so that women and men benefit equally, and inequality is not perpetuated. The ultimate goal of mainstreaming is to achieve gender equality."

Because women are marginalized normally in the existing patiarchical structure, Gender Mainstreaming does focus women's equitable participation at all levels of decision-making. However, Gender Mainstreaming is not about just adding a ' women's component' into an existing activity. Its target can be Man also if man is in disadvantage. It aims to bring the experience, knowledge, and interests of Woman and Man both to bear on the development agenda.

Thus, from the strictly Feminist concern of focusing on Woman emancipation only underlying the theoretical position of sexual difference, the issue of Gender Discrimination has now turned to

Gender Mainstreaming with focus not on single sex but on both sexes.

In this way, theoretically and praxiologically, both the way the feminist thinking has turned towards more gender-neutral positions. This development is quite consistent with the concept of Psychological Androgyny upon which present thesis focuses. The concept of Psychological Androgyny, as developed by Dr. Sandra Bem, who was honored the American Psychological Association Distinguished Scientific Award in 1976, can be that goal which would be unanimously acceptable to all the types of Feminisms, despite their theoretical differences.

Secondly, the concept of Psychological Androgyny can also be the most consistent theoretical basis for Gender Mainstreaming, which is the most recent turn in Feminist movement. Thirdly, the concept of Psychological Androgyny can also be seen as the logical derivation of Derrida's deconstruction, which is the post-modern development and where the evolution of feminist thinking has culminated theoretically. This being so, instead of going back to the feminism of difference to maintain the feminist project of maintaining sexual difference as suggested by Brioditti, it is better to take the feminist discourse from Deconstruction to Psychological Androgyny, both of which lead to gender-neutrality. So finally now we discuss the feminist implications of deconstruction leading to androgyny.

Feminist Implications of Deconstruction and Androgyny:

Like structuralism, Derrida's Deconstruction also roots gender differences into language. As Derrida says, so far as human species

are concerned, there exists nothing outside or beyond language. Thus, gender identity and gender differences are also products of language. By considering the gender differences to be originated from language, 'deconstruction' denies the essentiality of sex differences and thus proves to be more open, gender-neutral and emanicipatory from feminist point of view.

Secondly, like the structuralist linguist Saussure, Derrida also says that language is constituted of binary oppositions. But, Derrida further says that there a hierarchical relation is established between the two terms of binary pairs. One term is assumed to be privileged over the other. Deconstruction constitutes a method of subverting this hierarchy and thus nullifying the power relation between the two terms. Derrida's this method of deconstructing the polarities has great feminist potential. Using the principles of deconstruction, the binary opposition of masculinity/Feminity can also be neutralized as gender.

The first step of deconstruction is to identify the binary opposition and the hierarchy between the terms. We find that in masculinity/ feminity binary opposition, masculinity is said to be privileged term and the term feminity is said to be marginalized.

As per the second step of deconstruction, if we deconstruct the masculinity/feminity opposition, further we find that the very concept of masculinity is impossible without the concept of feminity. It is the feminity, which creates the concept of masculinity through difference. Thus, the marginalized term feminity becomes the base for the privileged term masculinity. Thus deconstruction denounces the hierarchy between the two terms. Masculinity/Feminity turns out to be not 'either/or' but 'both/and' within the system. And, coexistence of

masculinity and feminity without any power relations or hierarchy is the very concept of “androgyny”.

According to the idea of “psychological androgyny”, masculinity and feminity both coexist within same individual, irrespective of sex, in high proportion. Thus, Derrida’s deconstruction directly implies the concept of ‘psychological androgyny’.

To use Hegelian terminology, a bit loosely, we can say that Derrida’s deconstruction synthesizes ‘thesis’ of masculinity and the ‘antithesis’ of feminity and ‘androgyny’ without ‘either/or’ but ‘both’ aspects reflects synthesis. Thus, ‘androgyny’ can be said to be a corollary of deconstruction.

Derrida’s deconstruction can be applied to the history of feminist thought too as discussed here in three phases. If we consider the history of feminist thought as ‘narrative’ and if we deconstruct the ‘text’ according to Derridian principles, we identify the binary opposition of first wave/second wave feminism or feminism of equality/feminism of difference. Although deconstruction emphasizes the process of difference for the meaning to occur, the feminism of equality and of difference as binary pair are related to each other through difference, giving meaning to each other. Equality and difference both have ultimate roots in language. Thus, the linguistic turn given to feminist thought deconstructs the former two oppositions of feminism of equality and difference. In this sense, Julia Kristeva’s rightly describes the third phase as synthetic one.

Finally, though gender differences are said to be rooted in language as per structuralist and poststructuralist contentions, the language itself has been claimed and blamed to be phallocentric as Luce

Irigaray and Cixous criticism of Lacanian Psychoanalysis suggests. However, French Feminist criticism can be applied to Lacanian Psychoanalysis but not to Derrida's deconstruction. Because, Derrida denounces the very hierarchical nature of all binary oppositions of which language is constituted. Derrida propounding decentering would deny the center of phallus within language too.

Thus, in its decentering and anti-essentialist, anti-foundationalist position, Derrida's deconstruction is, in all its overt as well as potential form, thoroughly conducive and consistent with the feminist emanicipatory interests by leading the whole controversy of sex differences to gender-neutrality as also propounded by the concept of psychological androgyny, where neither sex is dominant nor secondary, both sexes are equal. Instead of biological preponderance, the psychological qualities of masculinity and feminity, without any hierarchical relation, are more relevant for every human being irrespective of their biological sex.

In short, psychological androgyny as a corollary of deconstruction is most consistent with the latest development of feminism theoretically and practically.

CHAPTER - 1 THEORETICAL BACKGROUND

Part-2 Androgyny in Psychology

I. Meaning and Definition of Androgyny

- Types of Androgyny
- Interrelation of Physical, Psychological, and Spiritual Androgyny:
- Operational Definition Of Psychological Androgyny
- Measuring Androgyny Through BSRI
- Some basic terms related to androgyny

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- Multidimensional Approach
- Unidimensional Approach
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- Empirical & Logical Basis of Bem's Unidimensional Approach:

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- Androgyny in Society
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VI. Two Forms Of Psychological Androgyny

THEORETICAL BACKGROUND

PART-2 ANDROGYNY IN PSYCHOLOGY

As the history of feminist theory outlined hitherto suggests, gradually reducing the gap between the sexes has been the focus of feminist discourse and emergence of the concept of "Psychological Androgyny" is one of its outcomes. Although the concept of androgyny is not as such a new concept, the concept of "psychological androgyny" became a focus of research in psychology only in recent years.

1. MEANING AND DEFINITION OF ANDROGYNY:

Etymologically the word "androgyny" comes from two Greek words "andro'' (aner) implying male and "gyny" (gene) meaning female. Thus, ancient Greeks used the word 'androgyny' primarily for 'hermaphrodites', which refer to the individuals having the external genitals of both sexes. As N.Mehta says "the ancient Greeks used the term 'androgyny' for either literal or figurative hermaphrodites, literally for individuals with external genitals of both sexes and figuratively for individuals having both male and female psychological characteristics. Androgyny is still used in medicine and biology in former sense." (N. Mehta 1993:25). Oxford dictionary also defines androgyny as 'partly male and partly female', origin from Greek 'aner' 'man' + 'gene' 'woman' (New Compact Oxford Dictionary. 2005:28)

Random House Webster's Unabridged Dictionary defines 'androgynous' as (1) being both male and female hermaphrodite, (2) having both masculine and feminine characteristics, (3) having

an ambiguous sexual identity, (4) neither clearly masculine nor clearly feminine in appearance, (5) *Bot.* having staminate and pistil late flowers in same inflorescence.

As Wikipedia defines, “Androgyny refers to two concepts. The first is the mixing of masculine and feminine characteristics, be it for example in the loud fashion statements of musicians like Ziggy Stardust or the balance of "anima” and "animus’’ in Jungian psychoanalytic theory. Secondly, it describes something that is neither masculine nor feminine, for example the Hijras of India who are often described as "neither man nor woman" (Wikipedia, 2005).

…Androgynous traits are those that either have no gender value, or have some aspects generally attributed to the opposite gender. Physiological androgyny, dealing with physical traits, is distinct from behavioral androgyny which deals with personal and social anomalies in gender, and from psychological androgyny, which is a matter of gender identity.” (Wikipedia, 2005).

In short, as stated above, there are two definitions for androgyny: physical (intersexual)-born with both male and female genitals; and psychological-combining both masculinity and femininity as traits of a unified gender that defies (gender-specific) social roles and psychological attritbutes. The common usage of the term androgyny in society refers to the latter description. As to the sexual orientation, an androgynous person can be heterosexual, homosexual or bisexual (http://uniorb.com/, 2005).

1. TYPES OF ANDROGYNY

Thus, the term androgyny implies physical, botanical, psychological, behavioural, and social expression of both sexes in

one or the other way.The social and behavioral aspects more fundamentally reflect the psychological androgyny only. Therefore, as pointed out by Lee Warren, term 'Androgyny' can be classified to have three fold dimensions:

1.1. Physical Androgyny

1.2. Psychological androgyny

1.3. Spiritual androgyny

1.1. Physical Androgyny:

Originally the term 'androgyny' implied the physical, biological, or anatomical aspect mainly. Original Greek reference to androgyny was primarily for hermaphrodites only. In Plato's "Symposium", we find the reference of androgyny as under:

" In it the character Aristophanes describes two humans joined as one, which Zeus decides to split in half. Each of this beings was globular in shape, with rounded back and sides, four arms and four legs, and two faces, both the same, on a cylindrical neck, and one head, …and four ears and two lot of privates, and all the other parts to match." (Quoted from Warren L. : 1)

Thus the original Greek concept of androgyny implied hermaphrodites having the body or genitals of both sexes.

The biological fact of both the sexes, having the hormones of both the sexes, also implies the physical aspect of androgyny. However, it is important here to clarify that the physical aspect of androgyny found in Greek culture, primarily as hermaphrodite, implies a type of gender disorder, while the physical aspect of androgyny in biology implies a normal hormonal fact.

If seen biologically, as Stockard J.& Johnson M.M. (1992) says, 'from the moment of conception until the sixth week of their

development, all embryos, be they XX or XY are sexually bipotential, they are anatomically identical, each possessing the necessary parts to eventually develop as a male or female (through absence or presence of Y chromosome)."

Thus, biological basis of sex differentiation is found in absence or presence of Y-chromosome. Presence of Y-chromosome through androgens secretion, ultimately promotes male growth and through lack of Y-chromosomes in female, the female growth is achieved. However, the biological facts of (1) AGS *(adreno- genital syndrome)*, (2) AIS *(androgene-insensitive syndrome),* (3) hermaphrodites and (4) sexual bipotentiality of embryos till the sixth week – these four biological facts can be said to imply the biological basis for androgyny. AGS refers to those individuals whose genetic sex is female (XX) and have the female reproductive organs internally but whose external genitals are masculine. Similarly, AIS are boys who are genetically males (XY) but externally they are feminized. Thirdly, hermaphrodites as discussed earlier refer to having genitals of both sexes. Fourthly, as stated earlier biologically embryos are bisexual till the sixth week.

Although first three of facts indicate anatomically gender disorder and gender abnormality, all these four biological facts do imply the bisexual potential of human organisms and this potential can be considered to be the biological basis of psychological androgyny, if we accept mind-body interaction upon which the whole branch of physiological psychology and the fact of psychosomatic disorder rests.

Secondly, Nobel Laureates- the Neuroscientist John Eccles and German Philosopher Karl Popper- in their book "Self and its

Brain"(1981) propound mind-body interactionism as scientifically most plausible explanatory hypothesis for explaining a number of empirical findings and neurological researches including those of Wilder Penfield (1975) and Roger Sperry's Split-brain studies.

In short, physical androgyny can be considered to be the biological basis for psychological androgyny.

1.2. Psychological Androgyny:

Psychological androgyny implies the development of the psychological characteristics of both the sexes, which have been stereotypically assumed. Thus, care, tenderness, submissiveness, emotionality etc. are normally accepted as feminine qualities; while strength, assertiveness, rationality etc. are said to be masculine attributes. To be psychologically androgynous means to have the psychological attributes of both the sexes, i.e. becoming instrumental and expressive, assertive and yielding, strong and tender, masculine and feminine both.

In the "analytical psychology" of Carl Gustav Jung, the 'archetypes' of 'anima' (woman in man) and 'animus' (man in woman) imply the concept of androgyny, but it has purely psychological connotations, as Jungian archetypes refer to the contents of 'collective unconscious.

It is this concept of 'psychological androgyny' which has recently been a focal area of research and which constitutes the main research area of present thesis too.

1.3. Spiritual Androgyny:

The Hindu concept of Lord Shiva as "Ardhanari-nateshwar" implies the spiritual aspect of androgyny, though it also connotes

and underlies the physical, biological, and psychological androgyny. Androgyny in Hinduism as 'Ardhanarinateshwar' represents the ideal of perfection in personality development.

As Warren Lee (1999) points out, in Christianity, Adam was created in the image or reflection of Elohim (Gen. 1:27) the creator, and Elohim's spiritual body is both male and female in principle. Thus, according to Warren, androgyny in Christianity refers to model of perfection, the balance of the male and female in one.
(http://www.plim.org/Androgyny.htm:)

Thus, androgyny represents the highest stage of the psycho-spiritual development of personality as epitomized by Lord Shiva in Hinduism and Elohim in Judo-Christianity, where the male and female principle of one's being are perfectly integrated in a single person. In Chinese religion of Taoism also the male and female principle in one's being are represented by Yin and Yang and Tao represents the perfection of personality development, where Yin and Yang both are harmoniously synchronized.

Lee Warren (1999), quoting Encyclopedia Britannica Macropedia, further says that the Dogan- African tribe has a myth of creation in which they believe that androgyny is a sign of perfection. (http://www.plim.org/Androgyny.htm:)

As Arthur Fredrick Ide (1991) says "most archaic civilizations were androgynous since the religion, they understood, had both sexual qualities and characteristics. Androgyny was a universal formula in the prehistoric world symbolizing wholeness and strength (quoted from Yajnik D.)

In short, the religious and spiritual traditions of East and West have unanimously suggested the ideal of 'androgyny' as a

sign of perfection in personality development, where the masculine and feminine aspects of one's own being are fully actualized and synchronized.

Interrelation of Physical, Psychological, and Spiritual Androgyny:

Nobel Laureates, the neuroscientist John Eccles and German philosopher Karl Popper in their book "Self and its Brain" propound 'mind-body interactionism', as scientifically most plausible explanatory hypothesis to explain a number of empirical findings of neurological research, including those of Wilder Penfield (1975) and Roger Sperry's Split-brain studies.

If we accept this mind-body interactionism, which underlies the whole branch of physiological psychology and the field of psychosomatic disorders, then the biological aspect of androgyny is considered as the physical basis of psychological androgyny. Thus the physical and the psychological androgyny are interrelated.

Similarly, psychological androgyny constitutes the basis for spiritual androgyny. As K. Fisher says: "I have been repeatedly struck by the fact that whenever I have asked a class on spirituality to list what they consider to be masculine and feminine qualities, we invariably end with both women and men arguing that there is no attribute they would necessarily exclude from their spiritual lines"(Fisher K. 1988:3)

Thus, spirituality, being the sign of totality and wholeness, the integration of the masculine and feminine attributes of one's own personality in the form of 'psychological androgyny', constitutes the prerequisite and/or parallel to spiritual growth.

It seems that 'psychological androgyny' and 'spiritual androgyny' represent the two sides of the same coin. As a student of psychology and science, we are concerned here with 'psychological androgyny' and neither with biological nor with spiritual androgyny.

Secondly, 'psychological androgyny' constitutes a link between the biological and the spiritual aspect of androgyny. Hence it has got special significance so far as personality development is concerned.

Thirdly, so far as manipulation and control aspect is concerned, human freedom has got maximum scope for the development of 'psychological androgyny' because biological aspect is much more 'given' and 'spiritual' aspect is unknown to science.

For all the three above-stated reasons, as a student of psychology, which is a behavioral science, here focus is on the scientific study of 'psychological androgyny'. Now onwards, throughout the whole thesis, the term androgyny refers to 'psychological androgyny' only.

2. OPERATIONAL DEFINITION OF PSYCHOLOGICAL ANDROGYNY:

In the field of masculinity-feminity research, the term 'psychological androgyny' was first introduced and operationalised by Sandra Bem by introducing Bem Sex-role Inventory (BSRI) published in the journal of Consulting and Clinical Psychology in 1974. Its scoring system was further modified and published in the same journal in 1977. Spence and Helmreich have done another significant research along same line in 1977 through which the

concept of 'psychological androgyny' has been further developed and operationalised differently through their Personal Attribute Questionnaire (PAQ). BSRI and PAQ constitute two major and popular measuring instruments of 'psychological androgyny'.

Before the construction of BSRI and PAQ, Constantinople published a review of the available masculinity-feminity tests in 1973 in which she pointed out two major assumptions underlying those M-F tests:

2.1. Assumption of Bipolarity: according to which masculine and feminine attributes are opposites and thus form a bipolar continuum running from masculinity on one extreme and feminity at the other.

2.2 Assumption of Unidimensionality: according to which masculinity-feminity is a unidimensional phenomenon rather than multidimensional. This means that masculinity-feminity reflect only one dimension with which gender choices, preferences, occupations, attitudes, behavior and other components are interrelated, e.g. if a person is measured as a masculine on M-F test then his behavior, attitudes, preferences etc. will also reflect masculinity. In short, all the components of gender stereotypes are interrelated underlying single dimension of masculinity-feminity.

Spence says that "in the time that has elapsed since the publication of Constantinople's review, a rash of new objective measures of masculinity and feminity has appeared, some wrested from already existing instruments (e.g. Heilbrun, 1976; Berzins Welling and Welter; Note 1) and questionnaires (Bem 1974; Spence, Helmreich and Strapp 1974, 1975). These new measures vary in the rationale that guided their construction but all have in

common *a rejection of bipolar approach in favor of a dualistic one."* (Spence 1979:68).

Thus, these M-F tests, including those of Bem's BSRI and PAQ of Spence, all adopted the "dualistic" approach instead of "bipolar" one. According to bipolar assumption, masculine and feminine attributes are opposites of each other. So high M-score would automatically imply low F-score, while dualistic approach rejects bipolarity and contends that it is possible that an individual may score high on masculinity and also on feminity and with this contention only the term "psychological androgyny" is introduced. As Spence puts,

"Along with one adoption of a dualistic approach to the measurement of masculinity and feminity, a new term has been introduced into psychologists' vocabulary to describe the possession of a high degree of both masculine and feminine traits. That term, of course, is 'androgyny'. (Spence 1979:168).

In short, before Bem and Spence, the prevalent measuring instruments of masculinity and feminity underlied the assumptions of bipolarity and unidimensionality. Bem(1974) and Spence(1977) and other new M-F tests unanimously rejected the bipolar assumption but on the assumption of unidimensionality, Bem and Spence differed, which will be discussed later. Thus, high masculinity and high faminity score on BSRI or on PAQ is the operational definition of 'psychological androgyny'

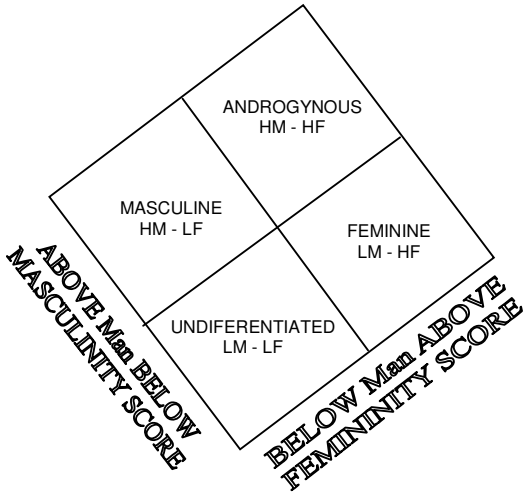
3. MEASURING ANDROGYNY THROUGH BSRI:

Bem's Original BSRI (Bem's Sex-role Inventory) contains 60 personality traits or attributes out of which 20 are stereotypically feminine (like gentle, nurturing, affectionate etc), 20 are

stereotypically masculine, (like ambitious, assertive etc) and 20 are neutral serving as filler items. Through subject's responses to BSRI, a person can be classified into anyone of the following four categories:

1. Masculine (High Masculine, low feminine)
2. Feminine (High feminine, Low Masculine)
3. Androgynous (High Masculine, High feminine)
4. Undifferentiated (Low Masculine, Low feminine)

As BSRI manual itself says, "The BSRI has two features that distinguish it from most masculinity-feminity scales. Most important, the BSRI treats feminity and masculinity as two independent dimensions rather than as two ends of a single dimension, thereby enabling a person to indicate whether he or she is 'High' on both dimensions ("androgynous"), 'Low' on both dimensions ("undifferentiated") or high on one dimension but low on other (either "feminine" or "masculine". (BEMSS Manual :4) This fourfold or quadrant sex–role typology based on a scoring through Median-Split can be schematically as under:



Schematic representation of quadrant sex-role typology based on scoring by a Median Split.

The subjects can further be classified as (I) stereotyped and (ii) cross-sex typed.

- Stereotyped: Males scoring high, above median on masculinity dimension and females scoring high above median on feminity dimensions, are classified as 'stereotyped'.
- Cross-sex typed: Males scoring high on feminity dimension and females scoring high on masculinity dimension are termed as 'cross-sex typed'.

Further, in terms of Bem's "Gender Schema Theory" persons can also be classified as (i) Gender schematic and (ii) Gender Aschematic.

- Gender Schematic: Gender schematic persons are stereotyped persons i.e. Masculine Male and Feminine Female.
- Gender Aschematic: Gender Aschematic persons are stereotype-inconsistent persons, i.e. Androgynous males and Androgynous females.

4. SOME BASIC TERMS RELATED TO ANDROGYNY:

In the context of various uses of the term androgyny, it is relevant here to distinguish among following four terms as pointed out by Spence:

4.1 Gender Identification.

4.2 Sexual Orientation.

4.3 Sexual Behaviors (Sex-Role Behaviors)

4.4 Personality Traits of Masculinity and Feminity

4.1. Gender Identification:

Gender identification refers to 'cognitive knowledge' of one's biological sex and emotional acceptance of one's biological heritage. As Spence defines "… With the exception of transsexuals, the conviction of psychologically 'belonging' to the gender dictated by one's own body and the lack of desire to change one's biological status are but universal even among those whose role and sexual preferences are inverted.' (Spence 1979: 169). This is called 'Gender Identification'.

4.2. Sexual Orientation:

Sexual orientation means the degree to which a person prefers the individual of same sex or of other sex as one's romantic partner.

4.3. Sex-Role Behaviors:

Role refers to normative expectations attached to one's position in society. It constitutes rules or codes of behavior of each sex, posed by particular culture or society. Sex-roles are simply a subset of behavioral expectations of society or culture on the basis of one's sex or gender. Society expects different behaviors in different situations and positions differently from males and differently from females. This is what is implied by sex-role behavior.

Here it is important to distinguish between 'gender stereotypes' and 'sex-role behaviors'. Gender stereotypes refer to 'beliefs' or 'expectations' of people about man and woman. Gender stereotypes may include beliefs about gender-specific appearance, dress, interests, occupations, and personality traits and also about

sex-role behaviors. Thus, sex-role behaviors refer to the behaviors posed by gender stereotypes. To analyze in Woodworth's S-O-R formula of behavior, we can say that gender stereotypes constitute the O-variable, i.e. the intervening variable, if Hull's terminology is used, while sex-role behaviors are overt, response variables.

4.4. Personality Traits of Masculinity and Feminity:

Personality traits or attributes are internalized characteristics. Traits become the constituents of personality. As Spence says:

"Masculine and feminine personality characteristics, in contrast to overt role behaviors, describe stable internal predispositions of broad trans-situational significance" (Spence 1979:169)

Masculine and feminine personality traits as measured by BSRI and PAQ imply social desirability too, i.e. both the instruments have categorized masculine and feminine traits on the basis of what society considers to be right or proper or socially desirable for man and woman to possess.

In short, masculine and feminine traits constitute the intervening personality variables, which are consistent to gender stereotypes, i.e. considered by society to be desirable for a man or woman to possess that trait.

2. THEORETICAL DEBATE OF UNIDIMENSIONAL VS MULTIDIMENSIONAL APPROACH:

About the relationship between the masculine and feminine personality traits and the corresponding sex-role behavior, two approaches are prevalent in M-F measurement: (1) Multidimensional Approach. (2) Unidimensional Approach.

1. Multidimensional Approach:

On the other hand, Spence disagrees with Bem's Unidimensional approach and proposes multidimensional approach to gender. According to the multidimensional view of gender, various gender-related phenomena are independent, not necessarily interrelated. Masculine and feminine personality traits may not correlate with one's sex-role behaviors, or interests or occupations. Summarizing both the positions, Archer and Lloyd (2002) say,

"There are two opposing ways of viewing the individual attributes derived from the components of gender stereotypes. One regards them as part of global entity so those traits are linked with behavior and occupations. Someone rating themselves as masculine on Orlofstery's SRBS (Sex-role Behavior Scale) would also be expected to rate themselves as masculine on BSRI, which contains personality traits. If this were the case, it would make sense to invoke general concepts such as masculinity and feminity to distinguish between people who have more or less masculinity and/or feminity on a range of attributes. This was the view advocated by Bem (1974, 1985) and Frable (1989) known as "unidimensional" view of gender.

However, many researchers took the opposite; 'multidimensional' view that the components of gender stereotypes and their associated individual differences can vary independently of one another (e.g. Archer 1989; Deaux, 1984; Spence and Buckner, 2000). Thus a man may have a nurturing (feminine or expressive) personality and have masculine interests such as footballs and cars". (Archer J. and Llyod B., 2002:36)

2. Unidimensional Approach:

Sandra Bem advocates Unidimensional approach to gender, according to which one's gender specific attitudes, preferences, occupations, behavior etc.- all underlie one dimension of phenomenon and all are interrelated. All the components of gender stereotypes (values, preferences, behaviors, interests etc) and their resultant individual differences are interrelated because they all underlie a single dimension of a particular gender trait or type, be of masculine or feminine or androgynous or undifferentiated. All psychological differences between the sexes underlie a single dimension variously labeled by such terms as masculinity-feminity, or sex-role identifications or sex-role behavior or gender specific interests etc.

Thus Bem does not distinguish conceptually between the masculine and feminine *traits* and the masculine and feminine *Sex-role Behaviors.* That is what, as Spence argues, is intimated by the only term 'sex-role' in the title of her instrument-BSRI. She has not distinguished, in her title, between sex-role behavior and traits.

2.1. Empirical & Logical Basis of Multidimensional Approach:

In support of multidimensional view of gender, Spence presents following arguments:

2.1.1. Variant Behavior:

Spence argues that one can 'play' a variety of roles, thus appearing quite different across situations to the observer, while at

the same time maintaining a fairly consistent and stable personality structure and self-image, e.g. one may behave submissively with an elderly person or with a boss but may not be feminine in type or trait. If one behaves submissively in a particular situation does not imply necessarily that one perceives one's self as submissive or one is not capable of being assertive. As Spence puts it: "A general tendency to confirm to social norms, personal commitment to the values implicit in role expectations, a desire to escape negative sanctions or a conviction that one can best manipulate situations to one's own advantage- may all motivate individual's willingness to mould their behavior into conventional roles at given times and in given situations, even when these behaviors are quite at variance with aspects of their personalities and their self-image." (Spence 1979: 170).

In short, one may have internalized a particular gender specific trait, but his or her role behavior may vary as per situations or circumstances and may be even contrary to one's trait. This fact implies the multidimensionality.

2.1.2. Traits and Role-behavior: Constricted vs. Wide range:

Spence argues that personality traits or attribute commonly designate the desirable aspects of masculinity and feminity and hence constitute a fairly constricted set of traits, while sex-role behaviors are more diverse in content including not only overt expressions of the traits but also other categories of activities like recreational activities, styles of dress, rules of social etiquettes and so forth. This implies that traits do not necessarily correspond with

sex-roles, and hence, multidimensional view of gender is more plausible.

2.1.3. Multidimensional Approach: Statistical Ground:

Over and above the arguments stated earlier, Spence empirically supports his multidimensional approach to gender through the findings that the correlation among various gender related phenomena, *though not absent* but are often small then assumed. As illustrative evidence, presenting the extra conclusion of his own study Spence says:

"Although correlations between the attitudes measure (attitudes towards women scale) and the scores on M and F scales of PAQ are typically in predictable directions, they are low and even in vary large sample, they are frequently nonsignificant" (Spence, 1979:181).

Similarly, as Spence says "there are no data to indicate that career-oriented women even those in male dominated occupations are notable for their disdain of women's work within the home or that in all aspects of life, they tend to resemble "one of the boys". The unimpressive correlations between various omnibus M-F tests support this suspicion (Spence, 1979:181)

Thus, 'masculinity' or 'feminity' of one's profession is probably a poor guide to one's vocational interests or traits. As Archer J. and Lloyd B. (2002) say,

"Across a number of studies, people's scores on gender-trait tests did show some modest associations with those on the respective measures of gender related activities (Archer 1989). Correlations between egalitarian views about the rights of women

and both personality and activities measures were lower. The low association between trait self reports and gender attitudes was confirmed in a more recent study using the modern attitude measure of Galick and Fiske and of Swim and Cohen described above (Spence and Buckner, 2000)." (Archer J. and Llyod B. 2002:36-37).

In short, a number of empirical findings support the multidimensional approach to gender.

2.1.4. Technocratic Culture and Multidimensionality of Gender:

Spence argues that "in our contemporary society in which sharp sex-role distinctions are breaking down, these relationships (among various components of gender related phenomena) are more likely to be weak or absent, rather than strong. Weak relationships are particularly to be expected between masculine and feminine personality traits and role behaviors that are quite different in kind, from the overt expression of these traits." (Spence J. T., 1979).

Thus, our technocratic culture necessitates diverse role behavior, which may be contrary to our traits. Thus, modern 'open' culture supports the multidimensionality of gender.

2.1.5. Contradiction between Bipolarity and Unidimensionality:

According to Spence, 'old styled' bipolar approach towards gender (where M and F are considered two poles and negative correlations between M and F scores would be predicted which is

contrary to actual data) implies logically the theoretical position of 'unidimensional approach'.

Bem (and also Spence) advocates the dualistic approach, while rejecting the bipolar approach to gender. As per dualistic approach, masculinity and feminity are not two extreme poles of single continuum but are two independent dimensions. Thus on the one side, Bem accepts two independent dimensions of M and F and, on the other hand, advocates 'unidimensional approach to gender' where attitudinal, behavioral and personality variables of gender related phenomena are all interrelated and underlie a single dimension. Apparently this seems contradictory. However, this contradiction is not logical necessity. Bem rejects bipolarity - this means that it is possible to score high on both the 'poles' of masculinity and feminity, that is, it is possible to be androgynous; while to accept unidimensionality means that if one is androgynous, i.e. if one scores high on masculinity and feminity both, then he would also be gender-neutral in his attitudes towards sex-role stereotypes.

Thus rejection of bipolarity implies androgyny, and unidimensionality is one step further, where androgyny is said to be reflected not only in traits but also consistently in other dimensions of personality like attitudes, behaviors, preferences etc. Thus contradiction, as implied by Spence, in Bem's rejection of bipolarity and acceptance of unidimensionality is not a logical necessity.

2.2. Empirical & Logical Basis of Bem's Unidimensional Approach:

Like multidimensional approach, Bem's unidimensional approach also has got its own logical and empirical basis. Bem rests her unidimensional approach on her 'Gender Schema Theory.

2.2.1. Gender Schema Theory:

It appears that Bem's 'unidimensional approach' has its theoretical basis in Bem's *Gender Schema Theory.* "Schema" in cognitive psychology refers to 'hypothetical mental structure which organizes, select and act on the information from the outside world." According to Bem 'gender' constitutes such 'schema' or 'lens' through which individual 'filters' and 'processes' outside information or the input gives meaning accordingly and then responds to the environment. This being so, according to Bem various categories and subcategories of gender stereotypes like attitudes, traits, interests etc are interrelated because it underlies the single dimension of particular 'gender schema'.

In short, Bem mounts his 'unidimensional approach' on the basis of his 'gender schema theory'. Now, as Archer J. and Llyod B. (2002) say:

"Spence and Helmreich (1981) expressed reservations about using BSRI traits, self-ratings to indicate this more fundamental distinction (of schematic and aschematic). There seemed to be logical objection, in that the BSRI was designed to measure the two dimensions, masculine and feminine traits; how could it then

be used to indicate a single dimension, the degree of schematic processing? No clear answer to this question was forthcoming". (Archer J. and Llyod B., 2002:33)

Thus, according to Spence, multidimensional approach rather than unidimensional approach seems to be more consistent with the rejection of bipolar model and acceptance of dualistic approach to gender.

2.2.2. Empirical Studies on Gender Schema Theory:

A number of empirical studies have been carried out to test the predictions from Bem's Gender Schema Theory. These studies can be classified into two groups: (1) Memory-related studies and (2) Judgments-related studies.

1. Memory-related Studies:

Memory-related procedure involves the extent to which people use the masculine and feminine connotations of words, when trying to recall them from a list. It involves counting the number of sequential masculine or feminine words remembered before switching to the other gender category. Bem (1981) used this method and found that sex typed individuals classified on BSRI showed more clustering by gender connotations than any other three-gender categories. Though Bem's her own finding supports her "gender schema theory", this finding has been criticized of type -1 errors.

Because, the difference found by Bem was very small and fine. Subsequent studies involving larger sample size, failed to replicate Bem's findings. (Archer et al 1955, Deaux et al 1918

Edwards and Spence 1987 Payne et al 1987 Mills and Turell, 1983)

Thus, these memory-related studies indicate that there is no link between endorsing gender trait self-descriptions and using gender as a schema for processing information.

2. Social Judgments related Studies:

Though memory-related studies cited above do not seem to support Bem's Gender Schema Theory, there is clear evidence that gender traits are associated with the sort of social judgments that form the basis for attitudes, prejudice, and discrimination. Prable and Bem (1985), Bem (1981) and Sausser & Kneating (1990) found that social judgments are correlated with gender traits.

"Because Bem viewed all sorts of evidence in terms of its support for gender schema theory, she blurred the distinction between the memory (where there is no link between gender traits and gender related memory) and social judgments (where there is a link between trait and judgment)."(Archer J. and Llyod B., 2002:35)

Coming back to our original discussion of unidimensional vs. multidimensional approach, we can conclude on the basis of above-stated findings that various components of gender stereotypes like attitudes, role behaviors, interests, preferences, activities etc are associated more with the cognitive process of judgments rather than with 'memory' and hence Bem's gender schema theory can be considered as an explanatory one for the unidimensional approach of Bem, where all the components of gender stereotypes are assumed to be interrelated.

2.2.3. Extra arguments in support of Bem's Unidimensional approach:

1. *Unity and Continuity of Personality:*

According to the behaviorist Hans Eysenck, personality type, which is a basis of individual differences, constitutes a group of correlated 'traits'. "Traits" constitute a group of 'habits' and 'habit' constitutes specific behaviors carried out often. Thus, Eysenck's hierarchy of personality type, traits and habits implies that one's sex-role behaviors, traits and gender-type categorized by BSRI- all are interrelated and underlie a single dimension, otherwise coherence, consistency and continuity of personality would be impossible. If one's behaviors, interests, occupations, traits, preferences etc are all independent as the multidimensional approach suggests, their continuity of personality and unity of person cannot be explained; not only that but predictions and control of human behavior also becomes difficult, if not impossible.

Logically, multidimensional approach presents 'fragmentary' view of personality where a particular type of a person as a whole becomes impossible to identity. Although trait theories of Cattell and Eysenck accept the traits or units of personality as independent, just as Bem also considers masculinity and feminity as two independent dimensions—all of these psychologists implicitly accept the unidimensional approach to make the coherence among various components of personality possible. In short, generalizations and predictions and control of behavior becomes possible only if we accept the consistency, coherence

and interrelationships among various components of personality and this is what unidimensional approach suggests.

2. Voluntary Selection of Sex-role Behaviors as Exceptions:

Secondly, as Spence has argued, many times a person may change or prefer sex-role behavior contrary to his gender traits or type. But such cases can be considered as deliberately chosen 'exceptions'. They are coping strategies or adjustments to the demands of the situations. Traits, in general, do remain the fundamental and most effective dynamics of behavior. As trait theorists define, 'traits constitute the stable sources of individual differences that characterize a person.'

3. Empirical Basis Is Not Absent:

Thirdly, if we see the empirical evidence, unidimensional approach is not totally devoid of empirical basis. As Spence herself has said 'correlations among categories of gender related phenomena' are not *necessarily absent,* but are often small'. Thus, so far as the controversy of Unidimensionality vs. multidimensionality is concerned, still more empirical research is required to have a final answer.

4. Answer to the Apparent Contradiction Between Bipolarity and Unidimensionality:

Finally, rejecting bipolarity and accepting unidimensional approach seems a bit illogical to Spence. Because while rejecting bipolarity, one accepts masculinity and feminity as independent dimensions and while accepting Unidimensionality, one considers all components of gender stereotypes as interrelated rather than

as independent; apparently though this seems contradictory, actually it is not so, necessarily. Because, rejecting bipolarity only makes room open for 'psychological androgyny', which allows an individual to have both the traits of masculinity and feminity, both together, not either/or. Thus, rejecting bipolarity and consequent emergence of the new concept of 'psychological androgyny' resembles, to say loosely, Hegelian 'synthesis' (androgyny) of 'thesis' (masculinity) and 'antithesis (feminity)' as propounded in bipolar model.

Thus, 'androgyny' underlying the rejection of bipolarity constitutes a 'synoptic' view and on the other hand 'unidimensional approach' also, while accepting the interrelationships among various components of gender stereotypes also constitute 'synoptic' view. Unidimensional approach to gender underlies the 'synoptic' or 'unified' views of personality, where all the components of personality are assumed to be interrelated. The only difference is regarding the content of components. The synoptic view of personality assumes the interrelations among the components of personality in general like attitudes, emotions, behavior, interests etc.; while in synoptic view of unidimensional approach to gender, all the interrelated components are specifically gender-related, which are parts of personality only. In this way, Dualistic approach and Unidimensionality are not necessarily contradictory.

3. THEORETICAL DEBATE OF BIPOLAR VS DUALISTIC APPROACH:

As explained earlier, the Constantinople review pointed out that all the existing M-F tests underlied the assumption of bipolarity

of masculinity and feminity. Only after the publication of review, new M-F tests are developed like BSRI and PAQ, which considered masculinity and feminity as two independent dimensions (dualistic) instead of two opposite poles of single continuum as bipolar model used to assume. According to bipolar model, a person can be either masculine or feminine, but cannot be both, as both constituted two opposite poles. As Spence puts it:

" A second related premise has been that masculinity and feminity are dimorphic and thus the psychological equivalent of biological gender. A single bipolar scale is therefore appropriate with masculinity at one end and feminity at the other. Again, the assumption of a negative relationship between masculinity and feminity is implicit…" (Spence 1979, 172)

To verify this implicit assumption of negative correlation between M and F scores as predicted by bipolar model, a number of studies have been carried out. As the empirical findings of Spence et al, using PAQ, suggested:

"Correlations between the M and F scales computed for each sex provide a dramatic refutation of the bipolar conception. Rather than being highly correlated in negative direction, M and F scores tend to be orthogonal or slightly corrected in a "positive"; high masculinity going with high feminity. Thus, if there is any association between the socially desirable personality characteristics on our M and F scales, it is in the opposite direction from that predicted by the bipolar model. Results failing to confirm the bipolar model have also been obtained by Bem (1974)" (Spence 1979:176).

To test the question, whether this bipolar view of gender prevails among psychologists and behavioral scientists only or it is

held widely by people in general; Foushee, Helmreich and Spence conducted a study upon college students and found that "… The vast majority of students of both sexes reported moderate to moderately strong negative relationships between the presences of the two types of characteristics. Thus, men or women described as having masculine attributes were rated as most probably lacking feminine attributes, those described as lacking masculine attributes were rated as most probably having feminine attributes and so forth."

Thus assumption of bipolarity was prevalent not only among behavioral scientists but also among general population too. As Spence says,

"Since our self-reports results with the PAQ, along with those of Bem with her inventory, have uniformly found essentially orthogonal relationships between the two clusters of traits, how has this misconception about their mutually exclusive nature come about?"(Spence 1979:176)

In short, against the popularly held misconceptions about the bipolarity of masculinity and feminity, Bem revolutionalized and first introduced the concept of psychological androgyny, not only that but also she operationalized and presented empirical support through data. Bem and Spence both unanimously rejected the bipolar model of gender and propounded dualistic model of masculinity and feminity on empirical and statistical ground. It is this dualistic approach only, which has made possible the emergence of the concept of 'psychological androgyny' implying the possibility of having high masculinity and high feminity both in the same person. It is only as a scientific or empirical answer to the 'bipolarity vs. dualistic model' controversy, that the term

'psychological androgyny' was first introduced in scientific psychology.

To summarize, Bipolarity versus Dualistic approach and Unidimensionality versus Multidimensionality – these two are the most important controversies underlying the construction of BSRI and PVQ, which are the two widely-used instruments to measure Psychological Androgyny. Therefore detailed analysis of these two controversies is made here as the theoretical background of Psychological Androgyny.

However, the open-ended controversy of unidimensional vs. multidimensional approach to gender, does not affect the present research directly because present research is concerned with measuring certain general personality variables, and analyzing their inter-correlations with the gender-related trait of 'psychological androgyny'. The controversy is about the relationship of gender -related trait and other gender-related phenomena like attitudes, behaviors etc. While present research is concerned with the analysis within personality variables or attributes only, and so far as personality attributes of masculinity and feminity are concerned, Sandra Bem and Spence both have considered these M-F traits to be dualistic, which are being studied here.

4. VARIOUS TERMS TO DESIGNATE GENDER DUALISM:

Here it is important to clarify that Sandra Bem uses the terms "masculinity" and "feminity" to categorize two independent dimensions of gender-specific personality traits, while Spence uses the term "instrumental" for masculine and "expressive" for feminine characteristics, following the classification made by

Parsons and Bales (1955), which was based on division of labor in all societies and all cultures. Bakan (1966) refers masculinity as "Male Principle" and feminity as "Female principle". Bakan equates male principle with "agency" and female principle with "communion".

Most important aspect of Bakan's exposition is that 'while Bakan described agency as more characteristic of males and communion as more characteristic of females, he explicitly espoused a dualistic position; that is, masculinity and feminity in these psychological senses are separate dimensions of personality and can coexist in the same individual. Not only that but Bakan further proposed that '*a high degree of either agency or communion, unchecked by the other, is destructive of the individual and of society,* most desirable is an abundance of both agency and communion, in short, androgyny". (Spence 1979:171).

Thus though Bakan does not use the word androgyny, he clearly denied bipolar view and argued for the possibility of co-existence of both in high degree before Bem. Not only that but Bakan also clearly suggested the social desirability of androgyny. Spence comments that Bakan's approach is to be contrasted with Parsons and Bales who remain silent on the desirability of androgyny. In short, androgyny constitutes a desirable goal of personality development according to Bakan, Bem, and Spence.

5. SIGNIFICANCE AND SOCIAL DESIRABILITY OF PSYCHOLOGICAL ANDROGYNY:

The significance and relevance of present research on 'psychological androgyny' can be outlined as under:

5.1. Androgyny in Society: The desirability and applicability of Androgyny in various fields of society can be highlighted as under:

5 .1.1 Androgyny in Society (Demand of the age):

Modern age characterizing the equality and freedom as the accepted values for both the sexes in almost all the spheres of life, the concept of 'psychological androgyny' can be said to be the 'demand of the age'. With increased women education, with ever growing number of women entering all the fields of occupation, women are expected to have 'instrumental' or 'masculine' traits and at the same time men are also expected to have 'feminine' or 'nurturing' traits to make marital and family adjustment successful. As Warren says:

"Only a person with both the so-called feminine virtues and the so-called masculine virtues will be able to function adequately in the full range of situations with which persons of both sexes are confronted"(Warren quoted in Braggin 1982:173).

The traditional masculine/feminine dichotomy, as Warren further says, creates an entirely false dilemma; it requires us to say either/or when what we need to say is both/and" (Warren, 1982:177). Suggesting the special significance of androgynous personality in contemporary society, Spence rightly says:

"In modern Western societies the contribution of expressive, communal skills to the successful execution of most 'instrumental roles' has been systematically underestimated, as has been the contribution of instrumental, agentic attributes to the effective execution of 'expressive' roles. Depending upon the requirements of particular tasks, either instrumental or expressive skills may be

paramount, with the other playing a secondary facilitative role, but both are frequently demanded.

What may be required at the individual personality level, is not the specialist, as sex-role theorists such as Parson suggest, but the generalist. Psychologically androgynous men or women may have the same advantage as any individual with multiple talents. Not only are they likely to execute their chosen roles more effectively than those with only instrumental or only expressive skills, but also they have the capacity to be role-flexible whether or not they elect to express it. Androgyny in this psychological sense does not dictate what roles men and women will prefer or adopt or find tolerable but does allow them to take on whatever roles they happen to choose or their life circumstances make necessary." (Spencer, 1979:184). In short, androgyny is the call of the time.

5.1.2. Androgyny in Society (Entertainment):

In fact, evidence of androgyny being embraced by society appears everywhere including institutionalized in entertainment and fashion cultures, more explicityly in expanding gay and lesbian communities. As trendsetters, entertainment and fashion industries have played an influential role in advancing a challenging perspective on human sexuality for modern times. In the 1980's, androgynous musicians –Boy George, David Bowie, and Prince- made headlines as they captured the world's fascination with sexual ambiguity. Perceived as a worldwide idol, Michael Jackson personifies androgyny with his falsetto voice and effeminate manners. Since the 1980's, Hollywood has produced movies depicting sensuous beatuies -Sharon Stone in Basic Instinct, Milla Jovovich in Resident Evil: Apocalypes, and Uma.

(http://uniorb.com/, 2005). Thus media has projected and popularize the androgunous role-models.

5.1.3 Androgyny in Society (Fashion Industry):

Capitalizing the growing social affinity to androgyny, the fashion industry promoted the meteoric rises of fashion designers –Helmut Lang, Giorgio Armani, Pierre Cardin, to name a few- for their unisex-styled clothes. To this day, glamourous male and female models sporting androgynous garments have often been found strutting down catwalks or posing for the covers of fashion magazines. Recently, the cosmetic companieshave joined in to lure metrosexuals (aesthetically conscientious straight men) to the lucrative markets of beauty products which once were considered exclusively for women. As reports trickled in, cosmetic surgeries have surged for both women and men in North America, Europe and Asia (http://uniorb.com/, 2005).

5.1.4. Androgyny in Society (Women Liberation):

As the Wikipedia says, “During the ‘counter-culture’ revolution in the 1960’s music and fashion industries inspired a trend towards self-exploration emphasizing individual freedom and self-realization. The women’s liberation movement of the 1970’s refuted the idea that women were naturally passive, emotional, and weaker than men. The notion of androgyny was not accepted in society until Dr. Sandra Bem introduced the concept of Psychological Androgyny to describe those men and women who did not fit into traditionally defined gender roles. She also forwarded the view that a blending of masculine and feminie dispositions is more adaptive than stereotypic emphasis on either

alone. At the heels of Bem's revelation, the gay liberation movement embraced the idea of androgyny, for it allowed lesbians and gay men to show their gender characteristics openly in society. Subsequently, the prevailing wind for social changes altered the preception of human nature consisting of opposite sex-roles to human nature unifying two complimentary sex-roles as a legitimate gender (http://uniorb.com/, 2005).

Thus, androgyny facilitates feminist concern of discarding sex-stereotyoes.

5.1.5. Androgyny in Society (Economic Transformation & Globalization)

The spread of the androgyny movement could also be fueled by the economic transformation of the workforce in developed countries. As nations became more affluent, greater amount of energy was required for production, thus businesses demanded a larger number of workers (men and women) to the workforce. The economic situations of wealthy nations enabled women to work with men as equals due to the current elevated women's status in male-oriented societies (http://uniorb.com/, 2005).

With globalization, the young male population is found to be insufficient to take the finanacial burden of the children, the aged and the women population which formed the 70-80% of the population.So it is the demand of the age that the female population may give up their traditional roles and may share the economic burden of the young male population in general.Because of this demand of the age also, the gender-stereotypes are loosened and androgyny concept and movement became more relevant.

In short, androgyny, implying 'Partly male and partly female' or gender –neutrality has become rampant in modern society not only academically but practically and socially also in various forms with different shades of meanings. This points to the need and relevance for the systematic scientific investigation on androgyny.

5.2. Role-Flexibility:

Because psychological androgyny underlies the actualization of masculine and feminine potentials, it 'allows for a wide range of role-flexibility. Androgynous persons can perform the feminine expressive roles as well as the masculine, instrumental roles better than stereotyped persons. Spence had rightly said that role flexibility of an androgynous person is like an individual having multiple talents, which does assist in adjustment and personality growth. Bem (1977), and Bem and Leuney (1976) have shown that androgynous person, defined as having high M and high F scores either on BSRI or on PAQ, manifest 'role flexibility' in the entire realm of sex-role behaviors. Bem predicted that psychologically androgynous individuals will more willingly and comfortably perform routine tasks customarily assigned to the other sex than conventional masculine men or feminine women.

5.3 Feminist Objection against Desirability of Androgyny:

The feminist objection against social desirability of psychological androgyny is that it endorses heterosexuality as the only valid life style denying homosexuality. Catherine Simpson argues that by idealizing the union of 'feminine' and 'masculine' traits within each individual, androgynism implicitly suggests a

rejection of homosexual relationship between individuals; but as Warren defends 'this is a misconception; androgynists advocates the intra-personal union of 'feminine' and 'masculine' character traits, not (necessarily or exclusively) the sexual union of males and females. It is also reasonable to predict that to the extent that the old stereotypes are replaced by an androgynous ideal of human character, lesbianism and male homosexuality will cease to be so deeply stigmatized because they will no longer be associated with 'womanishness' in woman or 'effeminacy in men' (Warren in Braggin M.V. 1982: 180).

In this way, because of the transcendence of sexual stereotypes through the concept of psychological androgyny, it serves specific feminist concern of women liberation and at the same time undermines feminist objection by keeping room for homosexuality and lesbianism.

5.4. Anti-feminist Objection against Desirability of Androgyny:

Some of the essentialists and anti-feminists consider 'psychological androgyny" to be an unattainable, utopian ideal, because of the fundamental, natural, given differences between the two sexes which cannot be overridden. However, this anti-feminist objection is far from empirical truth. A number of studies, including those of Margett Mead's studies of Chamoli, Aarapesh tribes, show that gender differences are sociocultural product, biology plays little role. Warren (1982) also citing a number of empirical findings concludes,

"Whatever effects sexual biology may prove to have upon human behavior, they clearly *can* be overridden by social influences and thus cannot be used to show that psychological androgyny is an impossible ideal."

5.5. Micro-level Desirability through Self-actualization:

Each individual, as a member of society, constitutes the micro unit of society. This being so, the personality development of each individual contributes to social progress. As discussed earlier, the concept of 'psychological androgyny' implies an ideal of 'perfection' in personality development. It underlies the actualization of both the feminine and masculine potentials of human being and hence it represents an ideal of complete and competent human being. To use Maslow's terminology, we can say that psychological androgyny suggests the highest stage of 'self-actualization' in the personality development. This is the reason why 'self-actualization' has been selected here to analyze it as a personality correlate of androgyny.

In short, through self-actualization stage of personality development of the individual, androgyny contributes to its micro-level desirability.

5.6. Psychological Androgyny and Mental Health:

Psychological androgyny gets its further relevance and desirability through its correlation with adjustment and mental health.

Bem's BSRI and Spence's PAQ findings have refuted scientifically not only the bipolar model discussed earlier, but also

the traditional belief that sex-typed people are socially and emotionally better adjusted. Studies with BSRI and PAQ both have showed that androgynous people were socially and emotionally better adjusted with greater mental health and higher self-esteem. Spence's own findings with different age groups and across a wide spectrum of socio economic levels, suggested that those higher on M and F are also higher in self-esteem. Individuals classified as androgynous are found to have the highest self-esteem scores followed by the masculine, the feminine, and the undifferentiated.

Secondly, as supportive data of a more behavioral nature, Spence posits the finding that Androgynous individuals received more academic and extracurricular honors and dating more frequently than undifferentiated individuals.

Thirdly, major evidence, according to Spence, comes from another self-report measure, the Texas Social Behavior Inventory (Helmreich & Stapp 1974) that suggests higher social competence and self-esteem of the androgynous.

Fourthly, in a study of homosexuals, Stephen Ward found that feminine and undifferentiated categories sought psychotherapy more often than masculine and androgynous category. Similar data was found by Heilbrun (1968).

In sum, as Spence concludes, the evidence is clearly contrary to the supposition that deviation from stereotypically expected patterns of masculinity and feminity threatens mental health and diminishes social effectiveness.

However, as Archer and Llyod say, "two subsequent critiques of Bem's research on androgyny (Locksley and Cotton, 1979, Taylor and Hall, 1982) concluded that there was a clear evidence for the association of masculine traits with mental health

measure of adjustment but no specific link with androgyny, androgynous people tend to be well adjusted because they have masculine traits. The link between self-esteem and androgyny also comes about primarily because of the association with masculine traits (March et al 1987)."

This criticism justifies the selection of mental health and the emotional competence—these two variables as personality correlates of Androgyny for empirical verification in present research.

5.7. Personal Values and Psychological Androgyny:

As Erik Erikson said, "each sex can transcend itself to feel and to represent the concerns of the other sex—if permitted to do so"(Erikson E. 1968:265). In his famous book "Gandhi's Truth" the eminent psychoanalyst Erik Erikson described Gandhiji as an 'androgynous' personality because Gandhiji was highly masculine in his fight against British Government, in his "satyagraha' but he also proved to be "Mother" to his disciples like Mahadev Desai, Miraben, Manuben etc.

As Joan Erikson says "an artist and saint have something else in common. They must and do reconcile at whatever cost of distress and frustration, the masculine and feminine in themselves (quoted from Doyle).

Thus, the Eriksons implied that saints and artists are androgynous persons. Present research on 'psychological androgyny' achieves its theoretical significance because of its attempt to verify this Eriksonian hypothesis about the androgynous

personality of saints and artists by taking their actual responses on BSRI.

Secondly, as per the Spranger's classification of personal values, saints represent the 'religious' value and artists represent the 'aesthetic' value. This further implies that those living with the personal values of 'religious' and 'aesthetics' must also be androgynous according to Erikson's hypothesis. Therefore in present research Personal Value Questionnaire (PVQ) has also been added here as a dependent variable to make empirical verification of Erikson's hypothesis and thereby to give theoretical significance to the study on 'psychological androgyny'.

In this way, present research on the study of 'some personality correlates of androgyny' has got not only applied, socially desirable, feminist significance but has also achieved theoretical significance, as discussed earlier, as a corollary of post-modern feminist theory. In the context of the desirability of psychological androgyny discussed above, the personality correlates of Androgyny selected here, are Mental Health, Emotional Competence, Self-actualization, Locus of Control and Personal Values.

6. TWO FORMS OF PSYCHOLOGICAL ANDROGYNY:

Joyce Trebilcot (1982) presents two forms of psychological androgyny:

(1)Mono-androgynism(M): according to which both feminine and masculine characteristics should exist 'side by side' in every individual. Each individual must develop both the traits, suitable for shared roles. Because 'monoandrogynism' presents a single ideal for all men and women, it is termed as such.

(2) Polyandrogynism(P): according to which all alternatives with respect to gender should be equally available to and equally approved for everyone regardless of their biological sex. One may choose to be masculine, or feminine or androgynous. Each individual should be allowed to choose and mould his or her personality type, irrespective of his or her sex. Because an individual is endowed here with freedom to choose among more than one alternative, it is called 'polyandrogynism (P)'.

Trebilcot says that though different in approach both forms of androgynism prescribe the same course of action, i.e. the promotion of gender crossing. As Trebilcot says: "Given, then the problem of deciding between M and P without reference to other alternatives, my tentative conclusion is that because of the great value of freedom, and because in an atmosphere of gender freedom, we will be in a good position to evaluate major arguments for M (that is the argument from the universal value of M), P is preferable to M." (Trebilcot 1982, 168).

However, in present context of present research, researcher believes that M and P both are complimentary. As P underlies the contemporary value of democracy and freedom, it constitutes the obvious 'fact' of modernity. Obviously, everyone is free to develop as masculine or feminine or androgynous as per his or her own choice. But the social desirability and significance of 'psychological androgyny' for individual, personal growth at micro level, suggests that given the freedom, it is desirable to choose androgynous alternative. In other words, P underlies "Is" (Fact); while M implies "Ought"(Value). Though one is free to negate "Ought", it is desirable if "Ought" culminates into "Is", so far as androgyny is concerned.

However, present research aims to analyze the personality correlates of androgyny among saints and artists, bracketing this controversy of M and P.

CHAPTER- 2 REVIEW OF LITERATURE

I. Studies Supporting Sex-stereotypes for Mental Health

II. Studies Not Supporting Sex-stereotypes for Mental Health

III. Studies Supporting Androgyny for Mental Health

IV. Studies Supporting Masculinity for Mental Health

V. Studies on Sex differences affecting the relationship between SRO and Mental Health

VI. Studies on the relationship between Age and SRO

VII. Studies on Androgyny and other Personality Factors

VIII. Studies on Locus of control

IX. Studies on Self – Actualization

X. Studies on Interrelationship of Androgyny, Locus of Control, Mental Health, Emotional Competence, Age, Gender, Personal Values and Self-actualization

XI. Studies on Social Desirability of Androgyny

XII. Empirical Studies regarding the Theoretical Issues of Bipolarity and Unidimensionality

XIII. Studies on Art, Literature, Androgyny & Self-Actualization

XIV. Studies on Androgyny and Culture

REVIEW OF LITERATURE

Present research focuses on the study of Psychological Androgyny and its personality correlates, namely, Emotional Competence (EC), Self –Actualization (SEA), Mental Health (MH), Locus of Control (LOC) and Personal Values (PV). The studies, primarily, on Androgyny, and secondarily on EC, SEA, MH, LOC, and PV reviewed here, are derived from following three sources:

1.Ms.Mehta's review of literature on Sex-Role Orientation.

Ms.Mehta's thesis (1999) submitted to Gujarat University on "A Non-Traditional Approach to Marital Adjustment among Working and Conventional Couples as a Function of Sex-Role Orientation and Marital Locus of Control" studied Sex-role Orientation as one of the independent variables. Her review of studies on SRO was very exhaustive. Therefore one of the sources for studies on Androgyny constituted Ms.Mehta's thesis.

2. Studies from APA/PsycINFO:

Inflibnet, a UGC's unit, assists researcher by providing topic wise, year-wise studies on the desired topic, surfing a number of reputed journals of the subject to which the research topic belongs. So, researcher obtained a heap of studies on Androgyny and other personality variables from Inflibnet through surfing of the APA software, named, PsycINFO, 1999. & 2000.

3. *Studies from Internet:*

Researcher also surfed various web sites on androgyny and studies obtained from Internet are also included in the review of literature for present research.

Making a detailed review of literature from the above-stated sources, the studies on androgyny, and some personality correlates as selected in present research, have been classified into following thirteen categories.

1. Studies Supporting Sex-stereotypes for Mental Health:

A number of empirical studies suggest that sex stereotypes facilitate mental health, i.e. females with high feminity and males with high masculinity have greater mental health. The studies by Connel and Johnson (1970), Rychlak and Lgerski (1967) (quoted from N.Mehta, 1992), and Sapperfield & Harris (1975) showed that traditional sex typing is positively associated with mental health. Tanwar and Sethi (1986) studied Indian female college students and found that feminine females showed higher self-esteem than the masculine females. Willbur as reported in Gupta et al (1985) found no relation between androgyny and adjustment. Gupta et al (1985) also found androgynous women to be highly anxious, contradicting Bem's assumption that androgyny is positively correlated to mental health (N.Mehta 1992:59).

As Mehta Nikhila says "even different views regarding socialization of a child namely psycho-analytical theory (Broufen Brenner, 1960), social learning theory (Mischel, 1966) or cognitive development theory (Kohlberg, 1966) emphasize that males should acquire masculine identity and females should acquire feminine identity for their psychological health"(Mehta N.1992: 57)

2. Studies Not Supporting Sex-stereotypes for Mental Health:

A second group of studies suggest that the traditional sex typing has detrimental effect upon mental health. As the studies by Consentino and Heilbrun (1964), Gall (1969) and Stericker & Johnson (1977) suggested, the females with high feminity had low self-esteem, low social acceptance, and high anxiety. (quoted from N.Mehta, 1992).

In a study of by Bhogle and Murthy (1988) on Indian Population it was found that feminine females had higher score on Eysenck's Neuroticism Scale, as compared to masculine females.

Similarly, highly masculine males too are found to have low self-acceptance, high anxiety, and high neuroticism (Mussen (1962) quoted from N.Mehta, 1992).

3. Studies Supporting Androgyny for Mental Health:

Another cluster of studies show that compared to sex-typed persons, i.e. compared to feminine females and masculine males, the androgynous persons, i.e. persons with high masculinity and high feminity are found to show greater Mental Health. Androgyny is found to be highly correlated with adjustment, mental health, low anxiety, low neuroticism, high self-esteem, and Self-actualization. (Kelley & Warrel, 1977; O'Conner et. al. 1978; Halgurd, 1978; Jackson, 1980; (quoted from N.Mehta, 1992), Bem, 1974; Spence et. al., 1975; Tanwar & Sethi, 1986).

Bem (1974) and Spence (1975), whose BSRI and PAQ respectively are considered to be most standardized, scientific, and widely used instruments to measure psychological androgyny,

also suggested on empirical grounds that androgyny facilitates role-flexibilty and mental health.

Millard et al. (1984) administered BSRI and Career Decision Scale to 109 students and found that androgynous persons experienced less careers indecision than the sex-typed and the undifferentiated.

Davidson and Sollie (1988) and Trivedi (1991) studied 112 and 100 married couples respectively and found higher marital adjustment score in androgynous SRO.

Murstein and Williams (1983) also found androgyny to be positively correlated with marital adjustment. (quoted from Mehta N.). Mehta N. (1992) and Mehta R. (1997) also found in their studies on Indian population that androgynous sex-role orientation was correlated with high marital adjustment.

Though a series of studies on university students (Bem 1975, Bem and Lennrey, 1976; Bem et al 1976), it was found that androgynous individuals showed higher self esteem, greater mental health and greater emotional and behavioral flexibility. (quoted from Mehta N. 1992).

Harris and Schwab (1979) found that androgynous individuals showed better personal and social adjustments than the undifferentiated and the feminine groups.

Deutsch and Gillbert (1974) and Nevill (1977) also found that androgyny facilitates adjustment. Harsh and Shethi (1989) examined the interrelationship between SRO and Lifestyles (working/nonworking styles) in 187 women, bringing out due degree of depression as a consequence. The findings revealed that having androgynous SRO was more beneficial, it helped

women to be more adaptable and as a result less stressed and depressed by life situation.

Williams et al (1994) compared three measures of androgyny and their relationship to psychological adjustment. SS included 52 female and 48 male undergraduates. They were given six indices of psychological adjustment, namely, self-esteem; Self-actualizing Tendencies, Subjective Well-being, Depression and State as well as Trait Anxiety were employed.

Results showed that all the three measures (Kalin's k the geometric mean and the arithmetic mean) of androgyny were highly interrelated and each was predictive of Positive Psychological Adjustment. Multiple regression analysis showed that masculinity was the best predictor of each external criterion.

Malhotra et al (1994) also found that problem solving is significantly better with androgynous group than the sex typed among tribals. The androgynous solved the problem significantly in less time than their masculine counter parts.

Problem solving implies creativity and Self-actualization indirectly. So it can be hypothesized on the basis of this finding that Androgyny may be correlated with Self-actualization. That is why in present research Self-actualization has been selected, as one of the correlates of androgyny.

Vonk R and Ashmore R.D (1993) examined several features in open-ended self-descriptions of 56 Ss, classified by a direct self-report measure as androgynous, undifferentiated, masculine, or feminine. The findings suggested that the androgynous Ss used more situational qualities in describing their masculine, feminine, and gender-neutral attributes. The findings showed that the androgynous showed more situational flexibility. This implies better

adjustment and greater mental health. This finding is consistent with Bem's contention that androgyny facilitates Role-Flexibility as discussed in " Androgyny in Psychology."

Similarly, Spangenberg J.J and Lategan T.P. (1993) examined the potential of Sex-Role Orientation and Attributional style as Coping Resources, using BSRI, Zeihin Coping Inventory and Attributional Style Questionnaire. Results showed that the Androgynous displayed significantly better coping abilities than the other SROs. Among males, the androgynous and the masculine displayed better coping abilities than the feminine and undifferentiated. Results also showed that Ss with androgynous SRO displayed significantly more flexibility in their coping styles than Ss of any other sex-role type.

It is obvious that good Mental Health underlies Emotional Maturity or Emotional Competence or Emotional Intelligence to use modern terminology of Daniel Goleman. According to Goleman, Empathy constitutes an important component of Emotional Intelligence. A study by Yarnold, Martin and Soltysick (1993) tested the hypothesis that an androgynous predisposition is positively related to Empathy. Ss were 65 medical students and residents. Results showed strong support for the hypothesis that scores on an index of androgynous personality are predictive of Empathetic orientation.

Picke and Plante (1997) tested the hypothesis that boys who are the most, well adapted to the classroom in primary grades are those displaying expressive or feminine type behaviors. Three instruments were administered to 38 teachers who evaluated 181 boys in first grade in French speaking Canadian schools. Boys perceived as masculine were evaluated as more aggressive than

boys perceived as feminine. Boys perceived as feminine obtained higher score on Anxiety & Prosocial behavior. Boys classified as androgynous and feminine and evaluated as prosocial were the object of more positive attitudes from teachers whereas opposite was true for masculine boys. Thus, androgyny and feminity were found to be pro-social.

Thus, here, though the measurement of masculinity, feminity, and androgyny constitutes the 'perceived' and 'subjective' measurement, even then it does indicate that androgyny leads to pro-social behavior and adjustment.

Gunter and Gunter (1990) studied 139 working couples and found that over and above feminine Ss, the androgynous Ss performed more domestic tasks than the masculine; the androgynous Ss also experienced the *least conflict* over domestic tasks. In other words, this study implies better marital adjustment with androgynous SRO. .

May A. & Spangemberg J. J. (1997) examined the relationship between SRO and coping ability of 169 adult males with managerial orientation. Results showed that both androgynous and masculine Ss showed significantly better coping abilities than Ss with feminine or undifferentiated sex-role orientations. Regarding coping styles, androgynous Ss displayed a significantly more flexible style in coping with the environment than the Ss with other SRO. No significant difference was found between the androgynous and the flexibility in coping with the self. The conclusion was drawn that both androgyny and masculinity could serve as effective coping resources in men with managerial orientation.

Stake J. E. (1997) conducted interviews with 124 female and 70 male undergraduates (aged 17-70 yrs). Most of them were African American (14%) or White American. Results showed that androgynous coping strategies were associated with greater positive well-being, and lesser negative well-being than were instrumental or indeterminate strategies. Well- being scores of expressive strategist were not significantly different from those of androgynous strategist. Thus, androgyny is found to be associated with coping and well-being. The important aspect to be noted here is that unlike most of the studies, here feminine or the expressive strategies were also found to be associated with well-being. The well-being scores of the feminine strategy users were not significantly different from those of the androgynous.

Shimonaka et al. (1997) studied the relationship between androgyny and successful adaptation among 634 men, and 802 women as randomly selected Japanese adults. The results showed that no age-effects for androgyny and masculinity were found in men. In the oldest age group (13-24 yrs., 25-44 yrs., 45-64 yrs. and 65& above yrs.), most women were classified as feminine. Mental Health imperative of this study was that there was found a relationship between androgyny and successful adaptation. Self-esteem and subjective health seemed to be the most effective predictors of adaptation. Thus, like previously cited studies, present study also suggests that self-esteem is the most effective component of mental health and adaptation and it is positively related to androgyny.

Napholz L. (1995) identified the relationship of SRO to the indices of psychological well-being among 148 American Indian working women from the milddle-East. Ss completed PAQ, Beck

Depression Inventory, Role Conflict Questionnaire for women, Rosenberg Self-Esteem Scale and the Satisfaction with Life Scale. The results revealed that the sex-typed group had significantly higher depression scores, higher role conflict scores, lower self-esteem score and lower life satisfaction score, compared to the cross-sex typed and the androgynous groups. The undifferentiated group had significantly lower self-esteem scores compared to the androgynous group. Thus, this study clearly reinforces the contention that androgyny facilitates self-esteem, life satisfaction and mental health.

Parker and Parker (1992) studied 51 males raised in the communicable childe-rearing system of Israeli Kibbutzim and 81 age-matched boys reared in nuclear families and compared them on self-esteem, SRO, and other variables. Results showed the positive relationship between androgynous identity and high social self-esteem.

Thorton & Leo (1992) examined the influence of gender role typing and multiple role involvement with regard to specific mental health concerns among 160 women (aged 18-51 yrs.). Results showed that feminine gender typed and undifferentiated women displayed greater depression and anxiety than did masculine or androgynous women, with no differences attributable to multiple role involvement. The lack of gender typing women, i.e. androgynous women seem to enable them to cope more effectively with the conflicting demands of multiple roles, thereby reducing the likelihood of using maladaptive coping behavior.

Asuncion C. M. (1991) examined the relationship between Masculinity/Feminity and Mental Health. In the 1st of two studies, 885 Ss (431 males) completed a version of the Masculine-

Feminine Personality Traits Scale and the Center for Epidemiologic Depression Scale. Results showed that 'assertive' Masculinity and 'affective' feminity were negatively related to depression. In the 2nd study of 135 male and 165 female Ss (aged 17-70 yrs.) completed the Masculine – Feminine Personality Traits Scales and the Eysenk Personality Questionnaire (EPQ). Overall, results showed that androgyny was related to lower depression and neuroticism and higher extraversion, implying greater mental health. The study also showed that typical negative gender-typed traits (masochism, self-sacrificing, woman syndromes) were related to higher levels of depression, neuroticism, and Psychoticism.

Agrawal and Agrawal investigated the relationship of Sex, SRO, and Psychosocial competence in three types (Masculine, Feminine & Both) of jobs. 80 male and 80 female Ss (aged 25-40 yrs.) completed BSRI, Rotter's LOC scale, and assessment of dimensions of Psychological competence. The results showed that the Masculine, the Feminine and the Androgynous groups showed similar patterns of psychosocial competence, while the undifferentiated group was consistently associated with Psychosocial incompetence.

Kimlicka et al. (1987) administered BSRI and POI to 339 male and 265 female undergraduates to test S. L. Bem's (1976) hypothesis that a relationship would exist between androgyny and a measure of psychological adjustment. The hypothesis was supported.

Heilbrun and Mulqueen (1987) did three studies, in which 225 female undergraduates completed the Adjective Checklist, a Stress Rating, a Sex-Role Instrument, and the Menstrual Distress

Questionnaire. Four Sex-Types were identified and compared i.e. (i) Balanced androgyny (2) Blended androgyny (3) Feminity (4) Masculinity. Results indicated that Balanced Androgynous demonstrated the poorest psychological adaptation to daily stress symptoms, Type A characteristics, and menstrual distress, while blended androgynous demonstrated the best. Findings from study 4, in which 47 female under-graduates completed an eating disorder inventory, reveal that feminine Ss were the most maladapted. Overall findings suggested the popularly conceived version of androgyny has been unmistakably promoted as beneficial. However, this study does imply that androgyny facilitates MH, even though it is blended and not balanced androgyny.

Chow E. N. (1987) examined the extent to which sex-role identity as defined by Bem's Typology, is related to occupational attainment, self-esteem, and work satisfaction for 161 employed Asian American Women (mean age 35.2 yrs.) As predicted, SRO was significantly related to occupational attainment. Androgynous Ss, with high level of occupational attainment had a higher level of self-esteem and a greater degree of work satisfaction than those with other SRO, implying better psychological well-being.

Tanwar and Shethi (1986) studied 308 female undergraduates, who were administered SROI, LOC scale, N-achievement Motivation Scale and Self-acceptance Scale. Multiple regression analysis showed that Ss' self-esteem was influenced by SRO, LOC, and N- achievements. Among all SROs, androgyny correlated most with self-esteem. As predictors, the descending rank-order was androgyny, LOC, feminity, and N-achievement.

Thus, here relationship between LOC and Self-esteem or MH is also found.

Laszerson J. S. (1985) studied 58 female and 45 male neurotic out patients. Results revealed that androgynous Ss displayed significantly higher self-esteem than the sex-typed Ss. It was also found that in regard to the discrepancy between real and ideal self, the discrepancy was the largest for the feminine Ss of both sexes, most of whom wished to be androgynous.

Pyke S.W. (1985) reviewed 26 published studies that used BSRI, it was found that androgynous Ss were generally more effective or flexible, androgynous Ss displayed greater psychological well-being than those categorized as undifferentiated or feminine. Ss with masculine SRO appeared to be just as well as or better adjusted than androgynous Ss.

Prager & Bailey (1985) examined the relationship of psychological androgyny to ego development in the context of J. Loevinger's (1976) theory and to Psychosocial Crisis resolution from the perspective of E. H. Erikson's (1963) theory. 30 male and 30 female Ss (aged 20-57 yrs.) completed the BSRI, the Washington University Sentence Completion Test, and an Inventory of Psychosocial Development. It was found that Androgynous individuals predominated in the higher stages of Loevinger's hierarchical model of ego development, with the masculine sex-typed orientation falling between the androgynous and the feminine sex-typed groups. Results supported the view that the psychological androgyny represents an added adaptive capacity that can be developed with the development of higher ego functioning. In short, psychological androgyny was correlated with

higher scores on psychosocial development and development in ego functioning.

Sahoo, Rout & Rout (1986) tested the hypothesis that androgynous individuals demonstrate a greater degree of psychological flexibility when compared to sex – typed individuals. On the basis of BSRI 45 male and 45 female Ss (20-23 yrs) were classified into three experimental groups- androgynous, sex-leaning, and sex – typed. Comparison of psychological rigidity, as measured by a rigidity – flexibility scale, derived from MMPI supported the hypothesis. Androgynous Ss showed maximum psychological flexibility. Results also showed sex – differences in rigidity. Females were found to be more rigid than males.

Zeldow et al (1985) administered PAQ, Beck Depression Inventory, Rotter's I-E LOC scale, Neuroticism and Extraversion scales of the Eysenk Personality and Inventory and the Confidence Interpersonal dissatisfaction measures to 72 male and 34 female first year medical students. Results revealed that Androgynous individuals were especially well – suited to assure the demanding and varied roles associated with the medical profession. Thus, present study validates the Bem's claim that androgyny facilitates role – flexibility.

It is very important to note here the study of Ray and Lovejoy (1984) who investigated the relationship between sex – roles and mental health in a random postal sample of 88 male and 126 female voters in Australia. Consistent to previous results, here also feminity was strongly correlated with Neuroticism, Lack of Assertiveness, and Lack of self – esteem. However, unlike previous studies, masculinity was also correlated with low self – esteem and low assertiveness. The most surprising aspect of the

results was that the undifferentiated showed greatest mental health, and the androgynous were also low scorers on three indices of Mental Health. Thus, the feminine, androgynous, the masculine, and the undifferentiated showed mental health in ascending order. The unusual result, inconsistent to a number previously replicated findings, points to the need for methodological review of this study. Postal results might have yielded less reliable results.

The oddity of these results may be due to Antill's inventory used to measure SRO. Normally Bem's BSRI and Spence's PAQ have been popularly used and have endowed almost consistent results. In above study, neither of these instruments were used, which might be also one of the possible reasons for the oddity of its results.

Rendely et al (1984) investigated whether adjustment difficulties among homemakers may be a function of discrepancies between life roles and sex – role orientation. Ss were 97 white, suburban mothers who were divided into full – time (n=59) and part – time (n=38) homemaker groups. Results showed significant differences with sex – roles, androgynous Ss showing less symptomatology than the undifferentiated Ss. Masculine and androgynous groups reported less frequently the symptoms of depression, anxiety, and interpersonal sensitivity than the feminine and undifferentiated groups.

Helibrun & Han (1984) compared 15 androgynous (A) and 15 non-androgynous (NA) male and 20 A and 20 NA female undergraduates who completed two Stress Self – Report Inventories. Results showed that A – females were superior in academic achievement to NA females, and their better

achievement was not associated with excessive stress. There was no achievement difference between A – males and NA – males. Thus, high masculinity in females contributed to achievements, but high feminity in males did not contribute.

Bierhoff and Kraska (1984) examined in two experiments, the relationship between androgyny/masculinity / feminity and achievement motivation. In both the experiments, the androgyny was closely related to fear of failure, leading high achievement motivation, while high masculine Ss and low feminine Ss scored lower on fear of failure. In short, androgyny was associated with high achievement motivation.

Most relevant study to present research was the study by Flagg (1984) who assessed self – esteem and psychological androgyny in 114 clergymen (aged 23-81), using BSRI and Texas Social Behavior Inventory. Like present research, it was hypothesized that more Ss (clergymen) would be classified as androgynous. This hypothesis was confirmed. Maximum Ss were androgynous, i.e. 32% Ss were androgynous, 31% undifferentiated, 24% feminine, and 16% masculine. Like present research, here also the amount of undifferentiated SRO is found to be higher than the sex-typed SRO, which might be due to the saints' or clergy's tendency of underestimation of themselves as discussed in the results and discussions of present research. The hypothesis that androgynous and masculine Ss would score significantly higher on self – esteem than the other two groups, was confirmed. Thus, androgyny was significantly associated with self-esteem, and also with being clergy as predicted by Erickson. Thus, Ericksons' hypothesis that saints are androgynous gets empirical support in Fragg's study.

Carlson and Baxter (1984) administered BSRI, Rosenberg scale of self – esteem, Self – rating Depression Scale and a Questionnaire to 49 homosexual males 23, hetero sexual males, 23 lesbians and 17 heterosexual females (aged 17-59 yrs). Results indicated that homosexuals were more frequently classified as androgynous than heterosexuals. Androgyny proved to be an indice of psychological health and there was no difference on the psychological health (score on self – esteem & depression) of homosexuals and heterosexuals. It was concluded that it is not one's homosexuality or heterosexuality that affects one's psychological health but how one perceives his/her own psychological masculinity / feminity.

Evans et al. (1990) studied 3,317 seventh graders and found that androgynous subjects, as measured by PAQ, had significantly smaller smoking frequency than the Masculine, Feminine, and the Undifferentiated. Androgynous Ss were more capable of resisting social influence to smoking.

Williams, Leak, and Millard (1984) correlated two continuous measures of androgyny- geometric mean and R.V. Kalin's (1979) method of scoring androgyny – with Self – monitoring. 88 undergraduates served as Ss. Bem's concept of androgyny and M. Shyder's concept of Self – monitoring, both emphasize traits characterized by behavioral flexibility across situations. Results indicated that Kelin's measure of androgyny was significantly correlated with self – monitoring.

Schwarz & Robins (1987) administered Washington University Sentence Completion Test and the Personality Research Form Andro Scale to 44 male and 40 female undergraduates to determine the relationship between ego

development and Psychologically androgynous, sex-typed, and sexually undifferentiated personalities. It was hypothesized that androgynous Ss would show higher levels of ego developments than would sex-typed individuals and that both would exhibit more development than the undifferentiated Ss. Results showed no such relationship between psychological gender and ego development. It is concluded that ego development is related to some sex role attitudes and communication, but not to self-perceived masculinity and feminity as typically measured.

Glazebrook C.K. & Mujas B.A. (1986) administered BSRI and Beck Depression Inventory to 52 Ss, who were the clients of depression. It was found that the depressed persons experienced greater role strain, but the hypothesis that the feminine, Masculine and the undifferentiated would have higher depression score, and the androgynous Ss would have lower depression scores was not supported.

Davis M., Ray J. J. and Burt J.S. (1987) administered Antill, Cunningham, Russell and Thompson Sex-Role Scales and the Fear of Success scale to 120 residents of the Australian city of Brisbane. The sample constituted of 61 females and 59 males. The results showed that sex fails to predict fear of success but sex-role orientation does. It is psychological feminity rather than actual feminity which predisposes to fear of success. FOS was negatively correlated with androgyny. (http://www. http://www.uel.ac.uk)

To summarize, barring only last two studies of Schwarz & Robins (1987) and of Glazebrook & Mujas (1986), cited above, a greater number of studies substantiate the hypothesis that, androgyny is positively correlated with Mental Health implying

higher correlation with adjustment, emotional competence and self-actualization too. However, as stated in a chapter on theoretical background, against Bem and Spence's contention that androgyny constitutes a desirable goal for mental health, certain researchers suggested that it is not the androgyny, but the masculinity, which endows positive correlations with mental health. In the above-stated studies also, we find in general that the androgynous as well as the masculine SRO are found to be positively correlated with mental health. So the critiques of Bem, hypothesize that whenever the androgyny is found to be highly correlated with mental health, it is due to high masculinity only underlying the androgyny itself. Thus, to get final answer on whether masculinity or androgyny (high masculinity and high feminity) implies better mental health; we need still more studies and hence the justification for choosing mental health, emotional competence and self-actualization as the personality correlates of androgyny for further analysis in present research.

3. Studies Supporting Masculinity for Mental Health:

As stated above some researchers contend that it is not androgyny but masculinity, which facilitates mental health. As Archer and Llyod (2002) put it,

"Two subsequent critics of Bem's research on androgyny (Locksley and Colten,1979; Taylor and Hall, 1982) concluded that there was clear evidence for the association of masculine traits with mental health measures of adjustment, but no specific link with androgyny: androgynous people tend to be well adjusted because they have masculine traits.(March et al., 1987; Spence and Helmreich, 1978; Spence et al., 1975), a link which is partly

spurious, since many masculine traits are similar to items used to measure self-esteem (archer, 1986; Baldwin et al., 1986). Perhaps more interestingly subsequent study demonstrated that men and women appear to derive their self-esteem from different sources, men from a belief in their abilities and women from their attachments and connections with significant others." (Archer J. & Llyod B. 2002:32)

This view gets further empirical support from a study by Bhogle and Murthy on Indian population. In Bhogle and Murthy's study (1988) on 240 Indian Female College students, it was found that *masculine* females were *happier* and *more adaptive and had less neuroticism score than feminine females.* Singh (1987) also found that among the four groups categorized by BSRI namely, Masculine, Feminine, Androgynous, and Undifferentiated—the *undifferentiated* were *highly neurotic* and *masculine* individuals were *least neurotic.* Harris and Schwab (1979) also found *masculinity* to be associated with *better_adjustment.* Ohio and Kumar (1990) found that professional women were *masculine* and *better adjusted.*

However only one exception has been found in a study by Tanwar and Shethi (1980) on 308 undergraduate females in the women colleges at Simla that in the multiple stepwise regressions analysis, the variable of *masculinity failed* to contribute significantly to the variance in *self-esteem.*

Maxwell et al. (1997) examined 164 married mothers and 20 singles divorced mothers and found that *married* mothers had *higher* instrumental or *masculine* scores *than* the *divorced* mothers, and the *divorced* mothers tended to have *feminine*

gender identifier. This means that masculinity facilitates marital adjustment.

Kopper and Epperson (1996) studied Gender role characteristics and several mental health variables. Results showed that neither feminity nor androgyny, but *Masculinity,* made *fairly consistent unique contributions* to the prediction of the *mental health* variables. Gender did not uniquely contribute to the prediction of any of the mental health variables.

Long Vonda & Martinez E.A. (1994) investigated the differences in self-esteem, self-acceptance, masculinity, feminity and locus of control of 114 Hispanic professional women, 60 female scientists, 83 female undergraduates, 52 female mental health clients and 57 female victims of domestic violence. Thus total 455 Ss were studied. Studies showed that *masculinity* had a *positive correlation* with *Self-acceptance* for Hispanic Ss.

Pei-Hui et al (1994) studied the relations between masculinity, feminity, androgyny on Neuroticism and Extraversion. Results from 200 university students indicate a *dominant effect of masculinity on self-concept and mental health*.

Long Vonda (1991) investigated differences in self-esteem, self-acceptance, masculinity, and feminity among 62 cell-biologists, 89 professionals, 83 college students, 52 Mental Health Clients and 57 victims of domestic abuse. Ss were all females (aged 19-65 yrs.). Ss completed POI for Self-esteem and BSRI. Results showed that *Masculinity was positively correlated with self-esteem* for all the groups but the students. Similarly, *Masculinity was positively correlated with self-acceptance* for all the groups except the students and the biologists. On the whole, Masculinity

in female Ss was positively correlated with self-esteem and self-acceptance implying better mental health.

Carlson & Steuer (1985) studied 569 Ss, (aged – 17-78 yrs.) consisting of 156 homosexual males, 72 heterosexual males, 176 heterosexual females. They completed BSRI, Self-rating Depression Scale, and Self-esteem Scale. Results showed that the *most potent predictor of psychological well-being was self-perceived masculinity* scores. *Self-esteem* was found to *increase* in all the four groups as the *masculinity* scores *increased.* Thus, as stated earlier, in females and as found here, in homosexuals also, it is the masculinity, which is found to be facilitating mental health.

Markstrom A. C. (1989) made a review of literature on relationship between SRO and Psychological well-being in adolescence. It was concluded that *masculinity and the masculine component of androgyny* are most associated with both male and female adolescents' *psychological well-being.*

Long Vonda (1989) says that previous studies that have suggested that masculinity is a strong predictor of mental health, have been generally limited to college students' population or have focused specifically on women. Therefore Long (1989) investigated the relationship of masculinity to self-esteem and self-acceptance in male professionals (u=96); clients (a=55) and college students (N=73). The POI, BSRI and Rotter's LOC scale, were administered to Ss. Results indicated that *Masculinity was found to be the best predictor of self-esteem* for male professionals and clients, the *best predictor of self-acceptance* for clients. Feminity did not correlate with self-esteem or self-acceptance in any group.

Krames, England & Flett (1988) administered PAQ, Geriatric Depression Scale, Hopelessness Scale, and three subscales from Self-evaluation of Life Function scale to 30 women. Consistent with previous meta-analytic results, correlation analyzer revealed significant negative relations between Masculinity and the cognitive measures of depression (i.e. hopelessness and self-esteem).

Marsh, Antill and Cunningham (1987) reanalyzed the data from a study by Antill & Cunningham, consisting of responses to 5 M-F instruments, 2 self-esteem (SE) instruments and 2 social desirability instruments. The unique contribution of masculinity to self-esteem was consistently more positive than that of feminity, which did not vary with sex, as posited by sex-typed models, nor did it interact with feminity as posited by androgyny models. In contrast to self-esteem, social desirability was more correlated with feminity than masculinity. Findings were consistent with the observation that self-esteem items may reflect stereo typically masculine characteristics, wherever social desirability items stereotypically reflected feminine characteristics.

Here it is important to note that in most of the studies indicating that masculinity facilitates Mental Health, the self-esteem, as a criterion of mental Health, has been emphasized and as Marsh et al. (1987)'s study cited above suggests, Self-Esteem items reflect stereotypically masculine characteristics. This might be the reason, why masculinity independently, and as a part of androgyny too, is found to be consistently, correlated with better MH. Some researcher had therefore rightly emphasized self-acceptance, rather than self-esteem, while predicting about mental health.

Lundy and Rosenberg (1987) administered the Coopersmith Self-esteem Inventory and BSRI to 194 adults. It was found that androgyny was the most predictive of self-esteem. As the authors say, "*These results were due to the strong independent correlation between masculinity and self-esteem.* An analysis of the items in Bem Masculinity scale suggested that the frequently reported masculinity – self – esteem relationship is an artifact of the inclusion of a strong self-image compared in the masculine stereotype, despite the fact that this component does not distinguish males from females".

Pyke S.W. (1985) reviewed 26 published studies, where BSRI was used. It was found that Ss with *Masculine* SRO were *better or equally adjusted* like the Ss with androgynous SRO.

Myers and Finn (1985) compared open-ended self-reports from 153 female and 80 male undergraduates to standard measures of *self-esteem* and androgyny. Sex-role was found to be significantly related to self-esteem, with *Masculine* and then androgynous Ss *scoring higher* than feminine or undifferentiated.

Here it is important to note that Myers A. M. and Stark A. C. (1985) have demonstrated and criticized that the construct validity of both, the androgyny tests and self-esteem tests is debatable, since both are based on the measurement of positive self-evaluation.

Adams C. H. and Sherer M. (1985) tested the theory that Masculine persons are as favorably adjusted as the androgynous persons are. 45 male and 45 female undergraduates, grouped on the basis of BSRI scores, as Androgynous, Masculine, Feminine, and Undifferenciated, were compared on MMPI and on the measures of self-efficacy and assertiveness. *Strong support was*

obtained for superior adjustment of Masculine males and females. It was found that *Masculinity* was related to *assertiveness and self-efficacy* rather than to maladjustment.

Whitley B.E. (1985) studied the efficacy of three models of the relationship between Sex-role orientation and psychological well-being. The 'congruent' model implied psychological well-being with traditional sex-typing, i.e. with feminine females and masculine males. Androgyny model implied psychological well-being with high feminity and high masculinity both within the same individual irrespective of their biological sex, and Masculinity model implied that higher masculinity leads to higher psychological well-being. Whitley (1985) tested the adequacy of these three models by a *meta-analysis of 32 previous studies* on this relationship between SRO and well-being. Results provided the *best support for the Masculinity Model, with Masculinity having moderately strong relationship to both- High adjustment and lack of depression. No support was found for congruence model.*

Bierhoff et al. (1984) examined the relationship between Psychological Androgyny and work attitudes. 80 students completed the German Extended Personal Attributes Questionnaire and a work questionnaire. As predicted, *High Masculine – typed Ss of both sexes performed in a more active, constructive manner than low masculine – typed Ss.*

Elpern & Karp (1984) evaluated the relationship between sex-role adherence and depression among 40 male and 40 female Ss, recruited from graduate education courses. Results showed that *higher M score* on BSRI was associated with *lower depression* and *lower M score and higher F score* was associated with *higher depression score.*

Frank, Towell, and Huyck (1985) assessed the effects of sex-role attributes on the mental health of a middle-class sample of 97 middle-aged women (aged 47-68 yrs.) who were mothers of an adult son or daughter. Ss completed a women's sex-role orientation scale, the SCL – 90, the self Esteem Scale and a scale measuring sense of Mastery. More Feminine Ss reported a greater degree of symptom distress. More masculine Ss reported higher self-esteem and greater sense of mastery. Masculine Ss derived higher sense of mastery and control within work environments, while androgynous Ss experienced greater sense of mastery within the context of their own domestic space. Masculine Ss reported more control and androgynous Ss reported less control over their lives after their children left home.

To summarize on the basis of the review of literature on the relationship between SRO and Mental Health, we can say that a greatest number of studies substantiate Bem's contention that androgyny constitutes one of the indices of better mental health. A small number of studies have also consistently shown (barring only one exception of the study of Tanwar and Shethi (1980)) that not androgyny but masculinity constitutes the desirable goal for mental health. So, whether high masculinity is desirable for better mental health or high masculinity together with high feminity, i.e. androgyny is more desirable for better mental health—this is still an open question and that is why here the relationship of SRO and mental health is to be further analyzed in present research.

5. Studies on Sex differences affecting the relationship between SRO and Mental Health:

The fifth group of studies indicates that sex difference is an important variable affecting the relationship between SRO and mental health. Studies show that males and females show different pattern of the relationship between SRO and mental health. Thus, among the Males, it is the Masculine Males who show higher self-esteem, while among the females it is the Androgynous females who are found to be more self-accepting and self-esteeming (Kimlicka, 1978; Tanwar and Sethi, 1986). It is important to note here that even in these studies, masculinity tends to be leading to greater mental health implicitly.

However, Bhogle and Murthy (1988) did not find the interaction of *Sex and SRO* to be statistically significant.

In present research, sex-differences have also been selected as one of independent variables to analyze further the relationship between SRO and Mental Health.

6. Studies on the relationship between Age and SRO:

It is widely held belief that Sex Role orientation (SRO) changes from Sex-stereotype SRO towards Androgynous SRO with increasing age.

J. S. Hyde, Krajnik M & Skuldt N. K. (1991) studied Androgyny across the life span using BSRI. In study 1, the Hyde and Phillis' previous finding (1979) of an increase in the number of Feminine women and Androgynous Men in the oldest age category (61 yrs & over) was replicated, which suggests that each gender may become more feminine with age. In study 2, the development of Androgyny was longitudinally investigated. Ss from

the original Hyde and Phillis' study were re-administered the BSRI 10 years later. 54% of the people remained in the same gender role category (SRO) over this period. The researchers tend to imply personality stability over time. This suggests little change in SRO with increasing age.

Carlson B. E. and Videka S. L. (1990) studied 2,374 adults, aging from 24 yrs to 65 yrs. Little empirical support was found for Role – reversal or Androgyny at midlife.

In short, further empirical investigations are also required for analyzing the relationship between Age and Androgyny. This also is the reason for selecting Age as one of the demographic independent variables in present study.

7. Studies on Androgyny and other Personality Factors:

Though all the above cited studies on the relationships between SRO and MH, SRO and EC, SRO and Self actualization, SRO and Self-esteem, SRO and Age, SRO and Sex etc. constitute personality variables only, there are some studies which have examined the relationship between SRO and Personality factors using 16 PF.

Ramanaiah and Detwiler (1992) administrated PAQ for the measurement of SRO and NEO Personality Inventory to 113 Male and 135 female undergraduates and found that the personality profile of the Androgynous individuals is different from those with other SROs.

Gupta et al (1985) administered BSRI (Indian adaptation) and Cattell's 16 PF Questionnaires (Form C) to 114 women belonging to post graduate departments of Banglore University. The analysis based on this study revealed different personality

factors among four categories of SRO, which can be summarized as under AS quoted from N.Mehta (1992):

1. Feminine women were more reserved, detached, submissive, and sober compared to Masculine females.
2. Feminine females were more submissive and conscientious than Androgynous females.
3. Masculine females were more dominant, warm, out going, enthusiastic, adventurous, happy-go-lucky, and impulsive than the Undifferentiated females.
4. Masculine females were more warm, outgoing, confident, free from anxiety, and self-controlled than Androgynous females.
5. Androgynous Females were more dominant and more prove to disregard rules than Feminine Females.
6. Androgynous females were more reserved, detached, anxious, and insecure and more prone to disregard social rules than Masculine females.
7. Undifferentiated females were more reserved and detached, sober and taciturn, timid, withdrawn, and more careless to social rules than Masculine females.

Thus, different factors of 16 PF are differently associated with different SROs.

Harris and Schwab (1979) have outlined the personality characteristics of the different psychological SRO. They found that higher Masculinity was associated with self-assurance, aggressiveness, and decisiveness in action, whereas higher feminity was characteristic of persons who were conscientious, sincere, co – operative, helpful, and relatively bound by customs and traditions.

In short, different personality factors are found to be associated with different SROs. We need further empirical studies on personality factors to make generalizations and predictions about the relationship of androgyny and personality factors as measured by 16 PF and personality type. Present research is confined to certain personality correlates, as measured by different psychological tools, and not to the analysis of personality factors of 16PF. Therefore in-depth analysis of personality factors and their relationships with different SROs is beyond the scope of present research.

8. Studies on Locus of control:

Present thesis aims to study some of the personality correlates of Androgyny. The personality variables selected here are Mental Health, (MH), Emotional competence (EC), Self Actualization (SEA), Locus of control (LOC) and Personal Values (PV). Among these five personality correlates, the MH, EC, and SEA are found to be interrelated in some of the studies discussed earlier. So we need separate discussion for LOC and PV.

Locus of control is the construct, which has been postulated and operationalized by Rotter (1954, 1966). As Mehta (1992) says, "Since its inception the concept of internal or external control has proved to be highly useful personality dimension for understanding the role of reinforcement in a wide variety of behavior situations. A brief examinations of the literature regarding the locus of construct postulated by Rotter (1954, 1966) shows that the categorization of people in terms of internal – external control orientations can add explanatory richness to other forms of social and psychological differentiations". (Mehta, 1992, 65)

Locus of Control implies attribution of causality especially in case of reinforcements. On the basis of the scores obtained on Rotter's locus of control scale, the subject can be categorized as 'external' or as 'internal'. 'Internal' categorization of the subject on LOC scale suggests the attribution of causality within one's own self, while the subject with 'external' categorization on LOC scale suggests the attribution of causality in external variables, other than one's own self. In other words, Internal locus of control refers to individuals who believe that the reinforcements are contingent upon their own behavior, capacities or attributes; while external locus of control refers to individuals who believe that reinforcements are not under one's control, but they are, rather, under the control of powerful others like luck, chances etc.

Locus of control has been found to be significantly related to academic achievement (Massari & Rosenblum, 1972; Wu Wu-tein, 1975; Gordon, 1977; Often, 1977). LOC has also been found to be associated significantly with anxiety and maladjustment (Farley & Mealica, 1972; Hanson, 1972; Archer, 1979), also with N. achievement, (Cranall, Katkovsky & Crandall, 1965), with Sex (Lao, Chaung & Yang, 1971; Parsons & Schneider, 1974, Murray & Mednick, 1975; Wu Wu-tein, 1975; Hiers & Hackel, 1977), with Sex-Role Orientation. (Geller et al, 1981; Gonzalez & Williams, 1981; Saxena (1984), Trivedi (1991) and with Socio – economic status (Battle & Rotter, 1972).

Anastasi (1988) says that LOC is being investigated in relations to such performance variables as learning, creative thinking, achievement drive and alcoholism, and demographic variables such as age, sex, socioeconomic level, and ethnic identification.

Tesiny, Lefkowitz & Gordon (1980) made a study on school children and found a significant positive relation between external locus of control and depression and significant negative relation between external LOC and achievement.

Farley and Mealica (1972), and Hung Ya-Yin (1975) have reported external LOC to be related to maladjustment.

Teski, Arcuri, and Lester (1980) found that elderly non-working housewives had stronger belief in external LOC than in working housewives.

Blendose (1979) found that women with internal locus of control had greater will power, were more trusting, more imaginative, more sociable, more warm-hearted, and had greater super ego strength than the external LOC women.

Archer (1979) reviewing past research on the relationship between anxiety and LOC found that out of 21 studies, 8 studies reported significant relationship between anxiety and LOC. Seven out of 10 studies showed higher test anxiety to be significantly related to greater externality on LOC. Thus, as Mehta says, 'the studies reviewed supported Rotter's contention that 'Internality' was associated with indices of personal adjustment."

Conservatism was also found to be related to LOC. Tseng (1970) found that internal college women were more conservative in their attitudes.

Loc has also been analyzed in the area of organizational behavior. Derakhashani (1977) reported a significant relation between LOC and job satisfaction in Iranian sample of 230. A longitudinal study of a representative national sample of USA of 3000 adult men found that LOC was significantly related to

occupational success, with internality, expected to be related to success in occupations. (Andrisani and Nestel, 1976).

To be of special significance in present research, are the studies which analyze the relation between SRO and LOC. Brehany and Geller (1981) found that androgynous persons were internal in LOC than feminine individuals. Deaux and Emsweller (1974) found that traditionally sex-typed American women were external on LOC.

Sex – differences are also found to be related to LOC. Mc Ginnies et al (1974) found that Australian, Japanese, Newzelander, Swedish and American women tend to be more externally-oriented than men. In another study by Parsons and Schneider (1974) also, it was found that French, German, Indian, Japanese, Italian, Canadian, American, and Israeli women were found to be more externally-oriented than men.

In general a number of studies have shown that over all men show more internality and women show more externality on locus of control scale (Hiers & Hackel, 1977; Lao, Chaung & Yang, 1977; Helode & Barlinger, 1984).

As Mehta (1992) says, “Inspection of a survey of research in psychology (ICSSR 1972) reveals that not a single Indian study on locus of control construct has been reported.” (Mehta, 1992,70) However, after 1970s, Rotter’s LOC has evoked interest among the psychologists of India.

Sharma and Chaudhary (1980) investigated the relationship between LOC and job satisfaction among 83 engineers. They found that externality was significantly and negatively related to job satisfaction.

In a study of Kulcarni (1983), 200 employees working in bank and insurance organizations in and around Nagpur, were administered the I-E locus of control scale and the Brayfield Rothe index of job satisfaction. The results showed that externality was significantly and negatively related to job satisfaction, not only that greater the belief in internality, higher the job satisfaction.

Bhogle and Murthy (1988) analyzed the relationship between the LOC and the psychological SRO. They found that the undifferentiated SRO group was significantly more external than the masculine and androgynous group. Similarly, the feminine SRO group was more external than the androgynous SRO group.

Ohri and Kumar (1990) have investigated the relationship among LOC, SRO and personality adjustment in professional and non-professional women. The result showed that professional women, who were internal, were socially well adjusted, liberal, and self-sufficient.

Rao and Murthy (1984) have attempted to find the psychological correlates of LOC, among 540 undergraduate college students of Bangalore University. Correlations were computed for the psychological variable and F and t-ratios were calculated for the demographic variables. The following conclusions were drawn:

1. Significant sex differences were reported in LOC with girls showing more externality.
2. High achievers were found to be more internal.
3. More internally–oriented persons were higher on n-achievement.
4. Higher score on I-E scale, indicating more externality was associated with greater maladjustments indicated by three

measures – anxiety, neuroticism, and the psychological morbidity scores.

5. The internal Ss were more radical and less conservative. (*This finding contradicts the finding of Tseng (1970) cited above.*)
6. The n-affiliation and extraversion did not yield significant results.
7. The students from arts and commerce faculties had higher score on I-E scale indicating greater externality and students from the faculty of medicines had lowest score showing greatest internality.
8. The relevant conclusion for present research was that the type of religion also showed significant differences on LOC. The Christians were found to be more internal than the Hindus and Muslims.
9. The Ss belonging to lower SES had greater externality.
10. Ss, whose mother was gainfully employed outside the house, were more internals.

11. The demographic variables like birth order, number of siblings yielded non-significant results. (*All the studies cited in this section have been quoted from N. Mehta, 1992)*

Some studies have also been conducted on MMLOC (Miller Marital Locus of Control), but being out of the scope of present research, studies on MMLOC are not reviewed.

9. Studies on Self – Actualization:

The studies on Self-actualization can be divided into three groups:

1. Effects of Training on Self-actualization.
2. Meditation and Self-actualization
3. Other studies on Self-actualization.

1. Studies on the effects of Training on Self –actualization:

Dominguez M. M. & Carton J. S. (1997) studied the relationship between Maslow's Self-actualization and D. Baumrind's (1971, 1973) concept of parenting styles. 184 college students were administered Short Index of Self-actualization and the Parental Authority Questionnaire. The results showed that parenting style was positively related to Self-actualization and 'authoritarian' parenting style was negatively correlated with Self - actualization.

Fogarty G. J. (1994) administered the E. L. Shostrom's Personal Orientation Inventory (POI) to 74 disadvantaged students (aged 26-45 yrs) undertaking a university preparatory studies program. At the commencement of the course, the group profile was typical of what Shostrom would describe as a non-self actualized group. At the end of the course, significant improvements in the feelings of competency, and self – confidence, self – acceptance and spontaneity were reported. In short, Self – actualization was improved.

2. Studies on Effects of Meditation on Self-actualization:

Janowiak & Hackman (1994) explored the efficiency of meditation and relaxation in promoting Self–actualization and changed in self – reported stress among 62 university students. Two groups were given Mantra meditation and a Yogic relaxation technique referred to as "shavasana." Pre-test and post–test measures were taken, both the groups showed significant increases in scores on Self – actualization.

Brown and Robinson (1993) studied the relationship between meditation and/or exercise on three measures of Self –

actualization in 103 advanced graduate counseling students (aged 23-62 yrs), who had completed at least one semester of practicum. Three dimensions of Self – actualization were inner – directedness, living in presence (time competence) and lowered anxiety. Ss, who mediated and exercised both, had significantly greater inner-directedness than those only exercised or who did neither. Significantly lower anxiety was found for those Ss who exercised and meditated both.

Alexander et al. (1991) did statistical meta-analysis of 42 studies on the effects of Transcendental Meditation (TM) and other forms of meditation and relaxation on Self–actualization. Meta - analysis revealed that the effect size of TM on overall Self – actualization was approximately three times as large as that of other forms of meditation and relaxation. Factor analysis of the 12 scales of the Personal Orientation Inventory revealed three independent dimensions: affective maturity, integrative perspective on self and world, and resilient sense of self. On these three factors, the effect of TM was three times as large.

SEA & Religion:

Watson et al (1990) found that the scores on Religious Orientation Inventory (ROI) correlated positively with scores on Short Index of Self – actualization (SISA), an instrument derived from POI, in 250 undergraduates.

Zika Bill (1987) compared Hypnosis with two forms of meditation and a placebo treatment for their effects on POI scores, i.e. on Self – actualization. University students were pre-tested on POI and then practiced either Hypnosis, Transcendental Meditation, a Western meditation or a Placebo Treatment for six weeks; after which they were post-tested on POI. Results revealed

that Hypnosis and Transcendental Meditation were significantly more effective in facilitating Self – actualization, with Hypnosis showing a slightly stronger effect. Findings support the research, suggesting that Hypnosis and Meditation are similar in promoting psychological health leading to higher self – actualization.

SEA & Health Practices:

Petosa et al. (1987) administered POI to 453 students, enrolled in Personal Hygieneb Classes. On the basis of POI scores 50 highest scorer of Self-actualization and 50 lowest scorers of Self -actualization were identified and were administered Health Practices Inventory. Results showed that High Self actualizing Ss reported using better health practices.

3. Other Studies (Self – Actualization)

In a study by Lewis J. D. (1996) Self – actualization score of 19 female and 25 male gifted students (12-14 yrs) in grade 7 and 8 were assessed. No gender differences were observed.

Lewis, Karnes and Knight investigated Self – actualization and Self – concept in 162 male and 206 female Gifted students in grades 4-12. Results showed that Self – actualization and Self – concept were significantly correlated.

Barnes and Srinivas (1993) studied the effect of personality variables like age, education, income, and marital status on Self – actualization in 64 women and 30 men (aged 35-55 yrs). The sex – differences were observed in Self – actualization, the Self – actualized women manifested superior traits on some of 16 PF factors, compared to Self-actualized men. Women had higher intellectual ability, tough mindedness, self – reliance, non-sentimentality, enthusiasm, emotional stability, accountability, and

responsibility, shrewdness, astuteness, and liberal and radical thoughts than men. Thus self - actualization seemed to be influenced by sex but not by age. Higher education, lower income level and unmarried statusb had definite impact on self – actualization.

SEA & Teachers:

Hawkins and Clark (1989) explored whether educational majors were more Self-actualized, than non-education majors and whether teacher groups differed in SEA levels. 20 elementary classroom teachers, 10 special education teachers of intellectually gifted children, 20 regular classroom student teachers, 10 special education student teachers, and 25 non-education majors completed POI. Contrary to expectations, all groups of teachers and student teacher were less Self-actualized than non-education major. Teacher groups were more other-directed, less inner – directed, showed less capacity for intimate contact and were marginally lower in self-regard.

SEA & Race:

Parham and Helms (1985) administrated Personal Orientation Inventory (SEA) and Racial Attitude Scale, the SCL – 90 and Personal Data information sheet to 166 Black students. Results showed that both “Pre-encounter’ racial attitudes, i.e. Pro-White- anti-Black and Pro-Black-anti-White (immersion) were associated with greater personal distress showing negative correlation with Self-actualization and positive correlation with feelings of inferiority, anxiety and hostility. Awakening Black Identity (encounter attitudes) were positively correlated with Self-actualization and negatively correlated with the feelings of

inferiority, anxiety and hostility. Thus, cognitive and affective components of racial identify were found to be correlated with Self -actualization.

SEA & Wilderness Use:

Young and Crandall (1984) tested the prediction that wilderness users are more Self-actualized than non-users and that frequent wilderness users are more Self-actualized than occasional users. Data were collected from a random sample of 503 adults in Illionois and 222 wilderness users. Ss were given a Self- actualization scale, based on POI and Scales designed to measure a general wilderness attitudes and commitment to wilderness. Results showed that wilderness use and wilderness attitudes were related to Self-actualization. Wilderness users were more Self- actualized than non-users and potential users were more Self-Actualized than potential non-users. Self-actualization was also positively related to wilderness attitudes. However, frequent wilderness users were no more Self-actualized than occasional wilderness users. Wilderness use was regarded by some individuals as itself a Self- actualizing experience.

10. Studies on Interrelationship of Androgyny, Locus of Control, Mental Health, Emotional Competence, Age, Gender, Personal Values and Self-actualization:

In present research, the personality correlates of Androgyny (AND) or Sex-Role Orientation (SRO) included Mental Health (MH), Self-actualization (SEA), Emotional Competence (EC), Locus of Control (LOC), Personal Values (PV), Age, Gender and Educational Level. So the studies found through the review of

available literature, on the interrelatioship among these personality variables are discussed here as under:

AND & SEA, SEA & Gender:

Schindler and Waters (1986) measured Self-actualization differences using POI between sexes and different degrees of athletic involvement for 200 college students. Differences were found on all six scales used: Time Ratio, Support Ratio, Self – Actualizing Value, Existentiality, Self-Acceptance and Self Regard. It was generally found that women were more Self- actualizing than men. It was also found that athletic involvement proved to be more Self-actualizing for Men, but not for Females.

Endo K. and Hasimoto T. (1998) studied the effect of sex-role identity on Self-actualization. Ss consisted of 86 male and 128 female undergraduates who completed Self-actualization scale (SEAS) and BSRI. Results suggested Sex-differences in Self-actualization. Females were more Self-actualized than males. Similarly, androgynous and/or masculine group were more Self-actualized than the feminine and/or undifferentiated group.

Results of multiple regression analyses indicate that high masculinity was conducive and high feminity detrimental of Self-actualization. Like previous study of Ento and Hasimoto, Faulkender P.J. (1991) also found getrimental effect of feminity on SEA. Faulkender P.J. (1991) examined the relationship between BSRI and SEA as measure by POI. 641 male and 116 female undergraduates participated. Results showed that SRO was significantly correlated with Self-actualization. Ss' scores indicated that high feminity is detrimental to SEA and high Masculinity is conductive to SEA, as measured by POI.

Kimlicka et al (1987) administered BSRI and POI to 339 male and 265 female undergraduates. The results supported the hypothesis that there exists a relationship between Psychological androgyny and Self-actualizing tendencies. The hypothesis was supported for women, but not for men. Thus Androgynous females were Self-actualized but not Androgynous men.

In short, Gender-wise females or feminity was found to be positively associated with to Self-actualization, while SRO-wise, feminity was found to be negatively associated with to Self-actualization. Thus further study is required to answer whether or not feminity is conducive to Self-actualization. In present research the hypothesis about the gender difference in Self-actualization is going to be checked empirically.

SEA and Age:

Hawkins, Hawkins and Ray (1989) studies 290 faculty members (aged 30-68 yrs) who completed POI to examine age – related trends for Self – actualization. Polynomial regression analysis – yielded no trends for Self-actualization and age, which contradicts A.H. Maslow's hypothesis that age is directly related to Self – actualization.

Kumari and Mathur (1989) investigated Self-Actualization as a function of age in 200 industrial supervisors and engineers (aged 25 -60 yrs), using POI. Three dimensions of Self- actualization (Time competence, Inner-directedness and Self -actualizing Values) were found to be correlated with Ss' age. Mediational Correlational Analysis indicated that Age was related to L. V. Gordon's bureaucratic organization dimension of Self - actualization as well as to Ss' belief systems.

SEA, Age & Sex:

Plouffe & Gravelle examined some correlates of SEA among 80 older adults. Significant effect of Age on SEA was found, with the older Ss having lower score on POI than younger Ss, contradicting again Maslow's hypothesis that Self-actualization may increase with age. Sex had no significant effect on SEA.

SEA & LOC:

Karnes and McGinnis investigated Self-actualization and Locus of control in 76 gifted children in grades 4 through 8, using the reflections of self by youth (ROSY) and the Nowicki –strickland Locus of control Scale for children. Results showed no sex-differences in SEA & LOC. The correlation between the scores of SEA and LOC was negative (-0.41) implying more internality of LOC with higher Self-actualizaiton.

Developed social interest is the major criterion of psychological maturity in Alderian theory. According to Adler, the extent to which a person achieves true self-significance depends on the degree to which his innate potentiality for "Socially useful goal striving" was been realized. Hjelle L.A. (1991) says that Self-actualization, though formulated in a somewhat different theoretical context, also represents a conception of psychological maturity. Past studies have shown that internally control persons display more social interest, and because social interest represents Self-actualization according to Adler's theory and psychological maturity according to Hjelle, it was hypothesized that Self-actualization must be correlated with Internal LOC and with more social interest. To test this hypothesis Hjelle L.A. (1991) studied 72 female undergraduates using social interest index (SII),

Nowckei – Strickland Adult Locus of control scale and the Personal Orientation Inventory (POI) for SEA. As was expected, results showed that those Ss evidencing high social interest showed significantly higher internal Locus of control and significantly more Self-actualization than those Ss evidencing low social interest.

SEA, EC & MH:

Rowan D.G. et. Al. (1995) assessed the relationship between measures of Marital Satisfaction, Self-actualization and Empathy in 30 couples. Results indicated that both Self-actualization and empathy scores were associated with marital satisfaction for males, but not for females. As empathy constitutes an important part of Emotional Intelligence according to Daniel Golman, it can be said that this study implies the relationship between SEA and EC.

As the study indicated higher Marital Satisfaction with SEA & EC, it can also be implied that SEA & MH and also EC & MH are also interrelated.

SEA & EC:

Brennan & Piechowstei (1991) on the basis of 4 case studies showed parallels between Emotional development and Self-actualization. People assessed at or near Dabrowski's Level 4 meet the criteria of Self-actualizing people. Thus Maslow's description of Self-actualizing people paralleled K. Dabrowski's theory of Emotional Development. Thus SEA and EC are fount to be interrelated.

SEA & MH:

Pufal S. I. (1995) studied total 80 students. The study showed that there was a trend towards higher Self-actualization among gifted students. The Self-actualization students had an Internal Locus of Control and a need for stimulation and varied experience. The hypothesis that higher Self-actualization will be correlated with lower anxiety and higher self-acceptance was not confirmed.

Vyrost J. (1995) investigated the interrelations between Self-actualization strategies and the coping processes. 110 industrial factory employees (aged 40-50 yrs.) were given a Self-actualization scale (SAS) and a coping scale. Results show that five behavioral constructions of the SAS (the straight A student, the expert, the inspector, the dictator and the permanent rebel) were correlated with the coping strategies of appraisal, information, seeking, problem-solving, affective regulation and emotional discharge. Results supported the interrelations between coping and Self-actualization. Thus SEA & MH are found to be interrelated implicitly.

Sumerlin J.R. (1995) investigated adaptation to homelessness in 145 homeless men living on the street using loneliness and depression scales and Self-actualization measures. Results showed negative relationship between sorrow & loneliness and Self-actualization. Thus higher SEA implies better adaptation and hence better MH.

Robbins R. A. (1991) exported the relationship of death concern and Self-actualization in 248 Hospic volunteers (aged 21-82 yrs.) Ss completed Personal Orientation Inventory (POI) for SEA, the Temple/McMordie Death Anxiety Scale and the Coping

with Death Scale (CDS). Hospic Ss were negatively related to the dimensions of SEA, namely, time competence, inner-directedness, self-acceptance, and self-regard. Thus, hospitalized Ss with terminal illness had low Self-actualization. CDS yielded more significant relationship with POI, implying higher Self-actualization with better coping with death.

Ebersole P. & Humphreys (1991) reported on the basis of empirical study that A. Jones and R. Crandall's (1986) short index of Self-actualization, was significantly correlated, in a study of 46 college students, with a measure of purpose in life. Thus, Self-actualization implies life satisfaction, fulfillment, and lack of "existential vacuum" as termed by Laing.

Richard and Jex (1991) studied 103 Ss (17-54 yrs.) and found that Ss identified as Self-actualized by the short Index reported low levels of trait anxiety and high levels of optimism and self-esteem.

Runco et al.(1991) administered How Do you Think (HDYT) test of creativity, the Adjective checklist and A. Jones & R. Grandall's short Index of SEA (SI) to 64 undergraduates. Correlation analyses indicated that each of the 4 HDYT scales was significantly and positively correlated with the SI scores. Thus Self-actualization and creativity are interrelated.

McLeod & Vodanovich (1991) investigated the relationship between measures of SEA and boredom proneness with 154 undergraduates who completed Jones & Crandall's short Index of Self-actualization and the Boredom proneness Scale. Total scores were significantly and negatively related, supporting the contention that individuals with high levels of Self-actualization possess lower levels of boredom proneness.

Although Self-actualization represents highest level of personality development, according to Maslow's theory, and although a number of studies cited hitherto indicated greater mental health with higher Self-actualization, it is important and interesting to note that self-oriented, other –oriented or socially prescribed perfectionism is not correlated with greater MH and SEA. Flett et al. (1991) tested this hypothesis upon 461 college students, who completed Multidimensional Perfectionism Scale, Short Index of Self-actualization and 297 of Ss completed Beck Depression Inventory additionally. Results showed that all the three dimensions of perfectionism (self-oriented, other-oriented, socially prescribed) were associated with lower total score of Self-actualization.

Socially prescribed perfectionism and low SEA interacted to predict higher levels of dysphoria. Overall, as the authors say, findings demonstrate a pervasive negative association between dimensions of perfectionism and Self-actualization.

Ford and Procidano (1990) studied the relationship of Self-actualization to life stress and perceived social support from family and friends. Measures of all variables were administrated to 54 female and 52 male undergraduates (aged 18-81 yrs.). The relationship of each variable to psychological adjustment (depression) was assessed. Results revealed that Self-actualization was related positively to perceived social support and inversely to life stress and depression. Social support was inversely related to depression and life stress was positively related to depression. Thus Self-actualization facilitates MH.

Srivastava (1989) examined the moderating effect of work motivation generated by n-self actualization on the relationship

between role stress and consequent job anxiety. Data from 400 technical supervisors (aged 54-50 yrs.) working in a large fertilizer project constituted the Ss. The moderated regression analysis showed that the work motivation generated by a Self-actualization significantly moderated the relationship of role conflict and role ambiguity with job anxiety. Thus SEA is correlated with MH.

Bordages J.W. (1989) divided 27 undergraduates into High, Medium, or Low Self-actualizing Categories based on their scores on the POI. Ss were given the logical reasoning Ability Test over three treatment conditions- High, Low and No-expectations with regard to performance. Results indicated greater personal autonomy for high and Moderate Self-actualizing Ss than in Low Self-actualizing Ss. Thus, Self-actualized were less susceptible to be influenced by the performance expectations.

Petosa et al. (1987) studied 453 students, enrolled in personal hygienic classes at a large southern university, who completed POI. 50 highest scorers on Self-actualization were administered Health Practices Inventory. High Self- actualizing Ss reposted using better health practices. If physical health constitutes an important pre-condition of good mental health, we can that this study, implies positive relationship between SEA & MH, by showing positive correlation between health practices & SEA.

Lee Raymond & Graham W. K. (1983) administered Job Diagnostic Survey and Job Satisfaction Survey to 2303 public employees of three local governments. Findings showed that employees in the public sector with high Self-actualizing needs tend to experience greater life satisfaction, higher general job satisfaction, higher intrinsic job satisfaction and weaker turnover

intension when working on complex, autonomous and challenging jobs than do the employees with low Self-actualization needs.

SEA, MH & Religion:

Watson et al – (1995) administrated Christian versions of humanistic statements of Self-actualization to 279 Christian college students. Results displayed reliable and sometimes moderately strong correlations with religious orientation and healthy self-fractioning. Thus, religion, mental health, and self-actulization were found to be positively interrelated.

AND & LOC:

Robinson L. M. (1995) studied the interrelationships of Afrocentric cultural beliefs, Sex-role Orientation and Locus of Control. Results showed that Afrocentricism was, not significantly, but marginally associated with Androgyny and Internal Locus of Control. Women in older age group (35-45) were more androgynous and more internal on Locus of control than in the young group. Compared to women, who attended predominantly White colleges, the women who attended Black colleges were more Androgynous, had higher Masculinity scores and were more Internal on Locus of Control and Personal Control. In short, androgyny & Internal LOC are found to be interrelated.

AND & LOC, AND & MH:

Nipholz L. (1991) investigated the relationships among SRO, LOC, Level of Depression, and age in Mental Health nurses (MHNs). 36 female Ss, out of which 19 were aged 30-40 yrs, and 17 were aged 41-59 yrs, completed PAQ for SRO, Rotter's I-E LOC scale and the Beck Depression Inventory. There was no

significant associations were found among the variables, however, as a whole the Ss who were androgynous in SRO, had an internal Locus of Control and were not depressed. Thus, on the whole, Androgyny was associated with Internal LOC and greater MH.

AND, LOC & MH:

Zeldow et. Al (1985) administered PAQ, Beck Depression Inventory, Rotter's I-E LOC scale, Neuroticism and Extraversion scales of the Eysenk Personality Inventory and the confidence, pleasure and Interpersonal dissatisfaction measures to 72 male & 34 female 1st yr medical students.

Findings reveal strong and consistent main effects of masculinity on depression, confidence, pleasure capacities, extraversion, LOC, neuroticism, and interpersonal satisfaction.

AND & LOC:

Campbell et al. (1990) explored the relationship between physical Attractiveness, LOC, SRO, and Assertiveness among 109 under graduates. Feminine Females, who were rated higher on physical attractiveness, were conversationally less assertive, speaking later. Physically attractive androgynous males were more assertive in order of speaking. Internal LOC was positively related to assertiveness, implying the relationship between AND and LOC.

Mullis and Mckinley (1989) examined the effects of SRO on LOC and Self-esteem. Ss consisted of 87 junior High School and 48 Senior High Females. Results showed that SRO was not related LOC. Androgynous Ss and Masculine Ss had higher self-esteem than the feminine and the undifferentiated females. Thus,

here AND & LOC are not found to be related, but AND & MH are interrelated.

Kapalka and Lachenmeyer (1988) administered BSRI and Rotter's LOC scale to 29 white adults (17M + 12F) in supervisory positions and 40 White adults (15M, 25F) in non-supervisory positions. Results showed that Ss employed in supervisory leadership positions were more androgynous and obtained more Internal Locus of control scores. Most women managers were 'androgynous', while male managers were either 'androgynous' or 'masculine'. Masculinity was positively correlated with Internal LOC, but feminity, in and of itself, was not relevant in predicting LOC s of Control.

Bhogle and Murthy (1988) assessed 300 male and 240 female undergraduates for LOC and SRO. Sex-differences were demonstrated which showed feminine orientation to be most external and androgynous orientation to be most internal

Wehr & Gilory (1986) found that scores on Rotter's Internal-External Locus of control scale were unrelated to sex-role orientation.

LOC and MH:

Levine J. A. (1995) studied the interrelationships among Androgyny, Creativity, Locus of Control, and Depression. Results showed Masculinity to be the major predictor of minimum depression, suggesting better mental health. Internal LOC had negative correlation with depression, suggesting higher Mental Health with Internality of LOC.

Sharma and Rosha (1992) investigated the effect of Self-actualization and LOC on altruism on female university students.

Results showed significant effect of Self-actualization on altruism. LOC also had significantly effect on altruism. Similarly, Ss scoring high on Self-actualization and having internal Locus of control score maximum on altruism scale.

SEA & PV:

Vyrost et. Al. (1992) conceptualized and operationalized the three perspectives of Self-actualization, namely, goal-oriented striving, internal value-oriented living and coming to terms with the requirements of social requirements and used these three perspectives to assess 297 adolescents and adults on Self-actualization. The authors concluded that there is a connection between the contents of preferred general values, the selection of behavioral strategies, and the formal aspects of SEA. Thus, here personal values and Self-actualization are found to be related.

AND & Values:

Feather N. T. (1984) made 2 studies on the relationship between sex-role orientation and value priorities. BSRI and Extended PAQ were administered for M/F scores, and Rockeach Value survey was administered for assume of value priorities. Ss in Expt.-1 were parents (mean age 48.67yrs.) and 201 of their children (mean aged 19-49 yrs.) Results showed that Masculinity and Feminity scores were significantly correlated with the relative importance assigned to values that could be classified respectively as agnatic/ instrumental and communal/expressive. There were no values distinctively related to psychological androgyny.

11. Studies on Social Desirability of Androgyny:

Studies on Social Desirability of Androgyny with special reference Organizational Behavior and Occupational Success:

As stated earlier, according to Bem and Spence both, androgyny implies greater situational and behavioral flexibility and hence Androgyny constitutes a socially desirable goal, especially in contemporary technocratic, open society, demanding both the attributes of both the sexes from both sexes. There are certain studies which support empirically the socially desirability of androgyny.

A study by Vonk et al. (1993) stated earlier, showed that androgyny is an instance of a more general situational flexibility (Vonk et. al; op. cit., 27 278-287). Similarly Spangenbern and Latagan (1993) also found that the androgynous and the masculine SROs displayed better coping ability (Spanenber & Latagan, op. cit., 195-203). Arkkelin and O'conner (1992) conducted three studies on "Good Professionals" on 272 college students and found that androgynous profiles were rated as desirable than either gender –typed, i.e. masculine or feminine profiles across occupations. In other words, college students considered androgynous SRO as more desirable for occupational success.

Another Study by Lagace & Twible (1990) showed that 41% of 177 retail and industrial sales-people were found to be androgynous on PAQ. The authors suggested that androgyny constitutes a desirable SRO for sales and marketing jobs and hence corporations should consider these results in the hiring and training of sales people.

Similarly Powell and Butterfield (1989) replicated their own earlier study (1929) of the applicability of the androgyny concept to management and re-analyzed the data from 574 undergraduates and 110 graduate business students using a revised BSRI. Re-analysis of the earlier data showed that the 'good manager' was described as more androgynous and less masculine on the revised instrument. However, the 'good manager' was described as more masculine and less androgynous by some groups with the newer sample of 199 undergraduate and 126 graduate business students. As the authors concluded, "the good manager" continued to be described as masculine rather than as androgynous.

In a previously cited study by Arkkelin et al. (1992) on 'good professional", the authors say, "While a masculinity bias was still observed, androgynous profiles were rated as equally desirable as Masculine profiles across occupation."

In short, studies on the 'Perceived' desirability of androgyny suggest that though androgynous SRO is perceived to be equally desirable SRO for occupational success, the masculine bias still prevails in the case of occupational success as it is also found in the case of Mental Health too.

Santa Clara (1998) studied 124 college students (aged 17-56 yrs.) and examined whether gender can be expressed productively through communicator style. The results showed that Rhetorically sensitive communicators tended to be undifferentiated in gender role, Noble selves were more likely to be masculine, and rhetorical reflectors were androgynous. The study suggested desirability of androgyny and flexibility in gender-based characteristics.

Kirchmeyer (1996) analyzed the gender roles of the members of demographically diverse groups and out comes of group decision-making. A total 160 undergraduate business students from a Western Canadian University were classified into four groups according to Bem's four Categories, with each group consisting of 40 students. Results showed that groups with high levels of androgyny made higher quality decisions than did the groups with low levels of androgyny. However, commitment to the decision was associated with high feminity. Thus, here the desirability of androgyny is suggested in quality decision-making. Sex differences and cultural differences were also observed in quality decisions. High androgyny of the women of non-European in descent, were more important to decision quality than the males of European descent.

Maier Mark (1993) examined alternative methods of operationalizing SRO and managerial effectiveness. Two studies on the relationship of sex-roles to management were made. In first study, 60 college students majoring in management participated by rating men and women in General, Typical, and Ideal manager using BSRI. In study-2, they described the qualities of Typical and Ideal manager. In the findings of study-1, 'Typical' male managers were perceived as Masculine. In study-2, Typical managers were seen as predominantly Masculine, while Best Managers were seen as Androgynous and having both feminine and masculine qualities. Thus Androgyny is perceived as the desirable SRO for being best manager.

Porter et al (1985) studied the balance of leadership between 107 men and 107 women undergraduates in small-group

discussions. Results showed that androgynous men and women shared leadership more than sex-typed partners.

Arkkelin D. and Simmons R. (1985) made three Experiments. In Expts.- I and II, a total of 36 sex-typed and 36 androgynous males and females (as rated on BSRI) were presented managerial profiles, ascribing all masculine, all feminine and the androgynous traits to hypothetical managers. Results showed that feminine-trait combinations were rated as significantly less desirable than either masculine or androgynous combinations, masculinity and androgynous traits were rated as equally desirable. In Exp. III, with 120 male and 120 female undergraduates, trait likableness and SRO were varied. In Exp. III, the feminine combinations were rated as the most desirable and the masculine combinations were rated as the least desirable.

Jagachinski C.M. (1987) studied 346 men and 346 women engineers and found that Ss scoring high on instrumentality, i.e. androgynous and masculine Ss, reported greater levels of responsibility, involvement in professional activities and satisfaction than low in instrumentality (feminine and undifferentiated). Feminity or expressiveness was not significantly related to performance and satisfactions. Self-ratings of various abilities were also positively related to instrumentality. Thus, androgyny and masculinity is found to be desirable for occupational success.

Plenty and Thomas (1986) studied 52 psychology practicum dyads (therapists aged 26-40 yrs. and clients aged 18-30 yrs.). The therapists and clients each completed BSRI-Revised and clients completed the Barrett-Lennard Relationship Inventory.

Results indicated that androgynous therapists were judged to produce more favorable relationships regardless of gender.

Studies on Social Desirability of Androgyny in general:

Green & Kenrick (1994) made two studies and found the desirability of androgyny in different relationships. All the Ss preferred androgynous partners.

Thornton and Leo (1992) examined the influence of gender-role typing and multiple role involvement among 160 women (aged 18-51 yrs.). Results showed that lack of Gender – typing, that is androgyny, enables woman to cope more effectively with the conflicting demands of roles. Thus, Spence's contention that androgyny gets social desirability through, providing flexibility in behavior, demanded by the multiple roles in contemporary technocratic society, gets empirical support.

The *feminist desirability* of androgyny gets empirical support from a study made by Warren & Lanning (1992) on battered married women. They compared 33 battered and 33 non -battered married women on BSRI and the fundamental Interpersonal Relations Orientation-Behavior Inventory. Results showed that battered Ss tended to be more feminine than non- battered Ss, who were more often masculine or androgynous. The study also indicated that battered women are more willing to tolerate control by others, i.e. less independent. Thus androgyny implies feminist utility empirically too.

To summarize the studies on social desirability of Androgyny, we can say that though the studies do suggest greater situational flexibility for androgyny implying greater occupational success, the 'perceived' desirability of androgyny is equal, but not greater to the masculinity. Thus just as for the relationship of

Mental Health and Androgyny, we need further studies for the comparative analysis of the Masculine and the Androgynous SRO for the actual and/or perceived successes of professional. Within the scope of the review of literature made from APA Psycinfo 1999, 2000 and other sources cited earlier, such studies on the actual success and social desirability of the Androgynous and the Masculinity were not found. Further studies in this direction and still deeper comparative review of available studies on different SROs, is still required.

12. Empirical Studies regarding the Theoretical Issues of Bipolarity and Unidimensionality:

As discussed in the "Theoretical Background of Androgyny", the Bipolarity in M-F tests imply that increasing in Masculinity must be accompanied by decrease in Feminity. Androgyny concept implying high score on Masculinity and Feminity both, rejects the Bipolarity of M-F traits.

Similarly, Unidimensionality of M-F Traits, as propounded by Bem, suggests that all the components of gender stereotypes like gender attributes, gender attitudes, gender preferences, role behavior etc.- all are interrelated. So if one is androgynous traits-wise on BSRI, then he/she must be open, and androgynous in his attitudes and behavior too. This is what implied by Unidimensionality, on the other hand, Spence propounded for Multidimensionality according to which all the components of gender stereotypes are independent dimensions. So one can display 'androgynous' SRO on the Traits of BSRI, while he/she can display Masculine or Feminine behavior in occupations depending

upon the situation. Certain empirical studies throw light on these theoretical issues of Bipolarity and Unidimensionality too.

Bipolarity vs Androgyny Studies:

Marsh and Richards (1989) examined the theoretical issues in androgyny theory, by using the data from 264 participants (aged 16-37 yrs.) The results were reasonably consistent for male and female subjects, for single-sex and mixed-sex groups, and also consistent across different measures of MF. The results clearly supported the Androgyny theory and contradicted the Bipolar perspective that an increase in masculinity score must be accompanied by decrease in feminity score.

Similarly, Sanders and Hoijtink (1992) studied whether Masculinity and Feminity should be viewed as opposite poles of a continuum or as independent characteristics. 166 normal Male and Female Dutch adults (aged 18 – 36 yrs) completed questionnaires based on the Groningen Androgyny scale by A. de Graaf (1984), in which they were asked to assess themselves according to Masculine and Feminine characteristics. The results were not discussed in the Abstract published in PsycInfo, 1999. But the title (Androgyny exists; Feminine and Masculine – Two Independent Characteristics) suggested that androgyny exists.

Vuister et al (1984) did factor analysis of the 59 items of the Groninger Androgyny Scale (GRAS), the Dutch version of BSRI. The GRAS scores of 75 male and 126 female Ss were analyzed. Results did not support the androgyny theories of S. L. Bem. Data suggested that masculinity and feminity comprise a single bipolar dimension and cannot be considered as independent traits.

Thus, contrary to previously cited studies, here, instead of androgyny, bipolarity is found to be supported empirically which implies that critical detailed analysis of this study is required.

Finally, in all the empirical studies on sex-role orientation, where BSRI or PAQ has been used, the fact that the Ss have been classified into four categories – namely the Masculine, the Feminine, the Androgynous and the Undifferentiated, clearly imply the rejection of Bipolarity and support of Androgyny theory. So, the study of Vuister et al (1984), which rejects Androgyny theory and supports bipolarity, needs to be analyzed further in detail; in which sense Vuister et al (1984) reject Bipolarity needs to be clarified, because if Bipolar perspective had been true empirically, no subject should have ever been classified as "androgynous", suggesting higher scoring on both the Masculine and the Feminine item.

In short, on the whole, empirical studies on the theoretical issue of Bipolarity of MF traits clearly support Bem's concept of "Psychological Androgyny" which underlies the rejection of Bipolarity.

Unidimensioanlity vs Multidimensionality Studies :

As discussed in the 'Theoretical Background', Bem and Spence both agreed unanimously on rejection of Bipolarity, but on the issue of Undimensionality vs Multidimensionality, both disagreed. Bem argued for Unidimensionality, according to which the masculine and/or feminine traits, sex-role orientation, gender behavior, gender preferences, gender attitudes etc.- all the components of gender stereotypes are interrelated and represent on the whole consistency as if underlying one personality

dimension. This means that if one is feminine, i.e. has feminine orientation then his or her preferences, attitudes, behavior etc. will also be, on the whole, feminine.

On the other hand, according to Spence's Multidimensional approach, all the components of gender stereotypes are independent. One's sex role orientation, sex role behavior, traits, occupational preferences, occupational activity, attitudes, toy preferences, dress choice etc.- all represent independent personality dimensions and are not necessarily correlated with consistency. One may be feminine trait-wise, may choose masculine games, and may be performing masculine activity at job as per the requirement.

A few empirical studies have been conducted throwing light on this theoretical controversy of Unidimonsionality vs Multidimensionality.

In a study by King and King (1996), two alternate full forms of the sex-role egalitarianism scale and the full form of the BSRI were separately administered on three occasions to 99 undergraduates (32% Males). Findings suggest that the attitudinal construct of Egalitarianism and the gender trait of androgyny are not associated. As King and King (1990) say, "Results suggest that there are no or very low associations between self-report measures of gender-role attitudes and gender-role traits."

Thus, the King's study partially supports Multidimensional approach, as the two components of gender stereotypes namely, sex-role Egalitarian attitude and the sex-role orientation, i.e. traits and attitudes, are not found to be interrelated.

Hong and Rust (1989) gave BSRI and an Openness to Experience scale, developed by R.W. Coan, to 100 Hongkong

Chinese men and women living in UK. The results showed that the androgynous Ss showed more openness to experience than their sex-typed counterparts. Thus, this study gives partial empirical support to Bem's Unidimensional approach. (PsychInfo 1999)

Yarhold , Briyant and Litsas (1989) found that Type A behavior and Psychological Androgyny were interrelated, which supports Unidimensionality where sex-role orientation and behavior are found to be interrelated.

Similarly, Zucker and Torkos (1989) assessed Androgyny in 54 boys and 57 girls in kinder garten through Grade 2 and found that children's preferences are related to sex-role orientation. The boys rated as masculine were found to be masculine on preference measure of sex-typing. Thus, here preference and sex-role orientation are interrelated supporting partially Unidimensionality.

Binion (1990) focused the relationship between Feminine and Masculine Personality attributes (as measured by PAQ), Sex-role attitudes and socialization antecedents among a sample of 123 Black women, 45 White women and 7 women of other racial or ethnic backgrounds. The majority of Black Ss reported androgynous identities but had traditional Beliefs about the female role in the family. Thus, here we find that Gender Attributes and Gender Beliefs are not related and thus, it partially supports Multidimensionality.

Marleau J.D. et al (1998) examined the relationship between gender-role orientation and the preference for sex of first-born child in 212 pregnant women (aged 20-40 yrs). Analysis suggested that gender-role orientation as measured by BSRI, does not effectively predict the preference for the sex of first-born child.

Thus, here SRO and preferences for the sex of the first-born child were not found to related, giving partial empirical support to the multidimensional approach of Spence.

Wulff M.B. and Steitz J.A. (1997) investigated psychological androgyny among 40 high school girls (aged 16-18 yrs.) from a college preparatory upper-level mathematics class and from a vocational track cosmetology class. It was hypothesized that traditional sex-role stereotypes would affect the career choice, i.e. mathematics group would have less feminine orientation, and cosmetology group would have more feminine orientations. But the results did not support the hypothesis. Cosmetology group was significantly more androgynous. Thus, the career choice and the sex-role orientation are not found to be interrelated, and thereby this study provides partial empirical support to the multidimensionality.

Rubenstein Gidi (1996) analyzed the relationship between the authoritarian personality and sex-role orientation, with the underlying hypothesis that authoritarian personality represents conservative ideology. Ss consisted 352 undergraduates (220 women & 132 men). And were measured on BSRI, RWAC (Right Wing Authoritarianism), Political Affiliation and religiosity level. The results showed that among men, no significant difference was found between RWA scores and BSRI's four sex-role orientations but among women significant difference was obtained. RWA score of the cross-sex typed women was significantly lower than that of sex-typed. Among women, significant difference was found between SRO and political affiliation and between SRO and religiosity level. Most of the cross-sex typed women supported the political left and defined themselves as secular. The results

support the claim that authoritarians internalize traditional sex-roles, where as non-authoritarians rebel against them. Thus, attitudes and personality type are correlated with sex-role orientation, thereby supporting partially the unidimensionality.

Murphy P. L. (1994) examined the parallel between the concept of Psychological Androgyny and Adler's concepts of social interest (Feminine Behavior Characteristic) and activity (Masculine Behavior Characteristic). Study showed that relationship existed between social interest and feminine Behavior Characteristic (BC) and between activity level and masculine BCs. Results showed that Adler's social interest and activity concepts and the concept of psychological androgyny are interrelated. Thus, here unidimensionality is supported.

De Heer et al (1992) investigated the relationship between SRO and Ss' Preferences for male/female counselors as low/moderate effective. Bem's Unidimensional approach, underlying Gender Schema Theory predicated that sex-typed Ss would decide the effectiveness of the counselors on the basis of Gender, while the androgynous would use objective information to give preference to the effective counselor. The results clearly indicated that the sex-typed and the androgynous-both the groups of Ss used the information related to effectiveness and ignored the gender information, contrary to the predictions of gender schema theory and unidimensional approach. Thus, present research clearly refuses Unidimensionality in case of the relationship between one's SRO and one's judgements and preferences.

Loble T. E. et al. (1989) classified 217 boys and 199 girls (aged 10-12 yrs.) as either sex-typed (SXT) or as androgynous (ANR) using the BSRI. Ss in Study-1 were given feminine,

masculine, or neutral questions on a cheating questionnaire, while Ss in Study-2 were given all three types of questions. All Ss were given the opportunity to Falsely report success (i.e. to cheat). Results of both studies support the hypothesis that SXT (Sex-Typed) Ss cheated more in gender-consistent questions than gender-inconsistent questions, while ANR (androgynous) Ss exhibited no difference. SXT girls cheated more in feminine questions than in masculine questions in study-2.

Thus this study indicates the relationship between SRO and one's preference or tendency of cheating on questions. This interrelationship between SRO and cheating behavior implies partial empirical support to unidimensionality and Gender Schema Theory of Bem.

Sebastian et al. (1987) studied the relationship between self-reported SRO and flexibility of approach to behavioral tasks. 201 normal male and female Spanish adolescents and adults (18-25 yrs. – University Psychology Students) Ss, classified on the basis of BSRI responses into different categories of SRO, were given a series of experimental tasks, and the group differences were assessed. Though the results are not clearly stated, the group differences imply the effect of SRO on behavioral flexibility, thereby giving partial empirical support to unidimensionality.

Durkin, Zaveri, and Condor (1986) investigated the relationship between sex-typing and sex-role attitudes with 40 undergraduate women. Ss were categorized as either feminine or Androgynous on the basis of PAQ. 20 Ss from each of the two categories then completed the British version of the Attitudes Toward Woman Scale. Findings indicate that androgynous women

held more liberal sex-role attitudes than their feminine peers, and thus findings supported unidimensionality.

Burke K. L. (1986) compared 40 university female athletes in the sports, which are traditionally considered to be inappropriate for girls (namely basket ball and softball) and other group of female athletes in the sports traditionally considered to be appropriate for girls (namely swimming & tennis). Both the groups of female athletes were compared on psychological androgyny. Ss completed BSRI. A Chi-Square and Phi co-efficient showed no significant difference between two groups on psychological androgyny, however, t-test between the masculinity scores of both groups did differ significantly. Thus, masculinity of a person and masculine sports activities found to be related giving partial empirical support to unidimensionality.

Heilbrun and Han (1986) found in an experiment with 47 female and 45 male undergraduates that androgynous blending of Masculine and Feminine Behaviors was positively related to Androgynous sex-typing in women though not in men. Thus this study supports unidimensional approval of Bem.

Frank D. I. et al (1986) investigated the relationship among sexual-role personality factors and sexual satisfaction through questionnaire completed by 155 women (mostly aged 21-45 yrs.). The hypothesis that the feminity, masculinity, or androgyny would exert a direct influence on sexual satisfaction was not supported, which implies multidimensionality indirectly. However, unidimensional approach does not necessarily imply that androgynous SRO would prove to be detrimental to sexual satisfaction. So the implication of this study for the debate of

unidimensionality versus multi-dimensionality seems to be controversial.

Heilbrun A. B. (1986) examined the relationship between Androgyny (as a sex type and as a behavior) and the perception, processing and recall of information in terms of conventional sex-stereotypes. 56 male and 55 female undergraduates completed a Gender-Schema test and a measure of sex-role blending. No gender-schema effects of any kind were evident for males. Men were equally sensitive to sex-role stereotypes, regardless of whether they were androgynous types or reported androgynous behaviors or whether they combined both forms of androgyny; while androgynous women were least concerned about traditional sex-role distinctions, just as feminine women displayed strongest gender-schema effects. Thus this study implies sex-differences in Gender Schema effects suggesting multi-dimensionality for men and unidimensionality for women.

Signorella & Jamison (1986) reviewed studies to evaluate the hypothesis of S.C. Nash that individuals will perform better on cognitive tasks when their self-concepts match the gender stereotyping of tasks. Results supported the hypothesis. Higher Masculine and Lower Feminine self-concept scores were associated with better performance on cognitive tasks, which are, thought to be masculine; These relations were observed more consistently for females than for males. Thus, here we find empirical support for unidimensionality greater for females.

Anderson K. L. (1986) administered 195 undergraduates (135 women) BSRI and a questionnaire assessing dependence, intolerance of ambiguity, impulsivity, and individualism to clarify the relationships among masculinity, feminity and androgyny and self-

perceived Flexibility and Individualism. ANOVA and hierarchical regression showed no evidence of positive androgyny effects, while higher masculinity was associated with flexibility and individualism particularly among women. Contrary to expectations, androgynous men were more rigid and confirming, while the cross-typed were more flexible and independent.

Thus, Bem's contention and conclusion based on study that androgyny implies greater flexibility is refuted here, and thereby unidimensionality is also refuted empirically.

To summarize, sex-role orientation, sex-role behaviors, gender attributes, gender attitudes, gender preferences, gender choices and interests etc.- all are various components of gender stereotypes. Interrelationship of these components imply Unidimensiouality and independence implies Multidimensionality. So far as the empirical support to the Unidimensionality versus Multidimensionality controversy is concerned, we can say, as the above discussion suggests, that some of the components of gender stereotypes are related and some are not. The area of gender stereotypes is so vast and the components of gender stereotypes are also so many that it needs further empirical findings and detailed theoretical analysis to have final answer on this controversy of Unidimensionality and Multidimensionality.

13. Studies on Art, Literature, Androgyny & Self-Actualization:

Manheim A. R. (1998) studied the relationship between the artistic process and Self-actualization. A literature review and a qualitative survey of 65 art students (aged 13-67 yrs) were conducted to examine the possible parallels between creativity, Self- actualization and the three dimensional art experience.

Results of this study revealed a correlation between creating three dimensional art work and Self-actualizing growth with the most frequent residual effects, being an increased sense of openness and self-acceptance. Majority of the surveyed artists felt that their creative activity enhanced their lives, those who were particularly motivated for creativity, found their life more globally enriched beyond the walls of the art studio.

In short, art and creativity were found to be correlated with Self- actualization and implied higher life satisfaction.

Leseur G. (1992) examined the mother-son relationship in two African – American novels [Go Tell It on the Mountain (1953) and not without Laugher (1971)] and two African West Indian Novels (Amongst Thistles and Thorns (1965) and In the Castle My Skin (1953) revealed that with their mothers, the sons form an intimate circle and learn from them the realities of life from both, a male and female perspective, i.e. androgynous perspective.

Robertson J. (1992) explored the politics of androgyny in Japan as enacted in Kabuki- an all male theater and Takarazuka- an all female theater. In such theaters, the gendered body is constructed and performative androgyny here involves the scrambling of gender markers like clothes, gestures, speech patterns, in a surface politics of the body. As the author says, the referent of Androgyny, i.e. the body, has charged over the past 300 years from male to female. Since the early 20th century, androgyny has been deployed choices and practices, by creating assured identity. It has also been evoked in reference to females who ‘do’ both ‘female’ and ‘male’ gender without being constrained by either. In short, in theater androgyny has led to females performing male roles too. Mechan D. M. (1988) identified the

appearance of a female character type, the androgyne, as she appears in various types of androgynous female, the androgyne female, as a strong autonomous female image that combines masculine, instrumental and feminine, expressive traits and behaviors, representing the full range of human potential. Physically female, she is athletic, assertive, dominant, independent, and strong (masculine traits) and also empathic, affectionate, gentle, nurturing, tender and warm. As Mechan says, The androgyne, is described as a positive, balanced image of womanhood that appears to be more popular in media than ever.

14. Studies on Androgyny And Culture:

Ravinder Shashi (1987) examined the Sex-Role identity of 58 male and 58 female college students in India and 92 male and 124 university students in Australia. The validity of the prediction that androgyny, is the product of educated, middle class, Western societies was empirically tested. Results reveal that sex-role transcendence rather than androgyny, is the product of Western societies such as Australia. Androgyny, on the other hand, was found to be more predominant in certain traditional cultures, such as India, and was particularly predominant among Indian males. Thus, cultural differences are observed in androgyny.

Gue Serena (1985) examined whether culture is a significant contributing factor to sex-typed behavior. Female Ss (aged 17-25 yrs) were grouped as follows: 82 Chinese Ss from Hong Kong & Singapore, 106 Chinese Ss who came to US after age 10 yrs, and 105 Anglo – American Ss. Ss completed BSRI. Results indicated that culture is a contributing factor for the development of SRO in woman. There were significantly different proportions of females in

each sex typed category according to the degree of American Acculturation. Ango-American Ss rated themselves high in androgynous category. In general, Chinese Ss had a higher proportion in undifferentiated category.

In this way, various studies on Androgyny were reviewed in above stated thirteen groups.

CHAPTER – 3 PROBLEM AND METHODOLOGY

I. The Problem

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PROBLEM AND METHODOLOGY

INTRODUCTION:

As discussed earlier, psychological androgyny constitutes the socially desirable goal of feminist movement in general, at macro-level and, in particular, also for the integrated personality development at micro-level. The concept of psychological androgyny transcends gender stereotypes based on biological essentialism. Hence, it is most consistent and conducive to the feminist concern of women emancipation. Not only theoretically Psychological Androgyny is conducive to the post-modern feminist thought, but practically also in modern global society, it is the demand of the age too. Therefore, Psychological Androgyny constitutes the most relevant research area for scientific study. In present research some personality correlates of Androgyny were analyzed among saints and artists as per Eriksons' hypothesis.

The concept of psychological androgyny implied the actualization of the masculine and feminine, both the potentials within the individual irrespective of their biological sex. Thus, androgyny suggests the integrated, self-actualization level of personality development, which is the highest level in Maslow's model of hierarchy. Because androgynous persons are thus expected to be at the self-actualization level of personality development, psychological androgyny must be correlated with greater mental health, higher self-esteem, and greater emotional competence. The review of literature also suggested the necessity to investigate the correlations between Androgyny and Mental Health to get the final answer on whether Androgyny or Masculinity facilitates Mental Health. Therefore Mental Health (MH), Emotional

Competence (EC) and Self-actualization (SEA) have been selected here for correlational analysis.

If the Androgynous are expected to score high on MH, EC and SEA, on Rotter's Locus of Control Scale also the androgynous are hypothesized to be internals, and on personal value questionnaire, the persons with 'Religious' and 'Aesthetic' values are expected to be androgynous as per the Eriksonian hypothesis about the androgynous personality of saints and artists. In this background, present research aimed at the study of these personality variables as correlates of androgyny among saints and artists.

THE PROBLEM:

The problem of present research can be divided into two parts:

1. To study some personality correlates of androgyny like (I) Mental Health, (II) Emotional Competence, (3) Self-actualization (SEA) (IV) Locus of Control (LOC) and (V) Personal Values (PV) among saints and artists.
2. To verify empirically Joan Erikson's hypothesis that saints and artists are androgynous persons.

THE SCOPE:

The scope of present research is limited to following areas only:

1. Androgyny can be studied at three levels—(I) Physical androgyny, (II) Psychological androgyny, and (III) Spiritual androgyny. Present research is limited to the study of psychological androgyny only.

2. Psychological androgyny can also be measured and analyzed through various masculinity/femininity (M/F) scales including Bem's BSRI and Spence's PAQ. The present research is limited only to the study of psychological androgyny as measured and analyzed through BSRI (Bem's Sex-Role Orientation Inventory).
3. A number of personality variables can be analyzed as the correlates of psychological androgyny. Present research is confined to the correlatioanl analysis of only five variables, namely, (I) Mental Health (MH) (II) Emotional Competence (EC), (III) Self-actualization (SEA), (IV) Locus of Control (LOC), and (V) Personal Values (PV).
4. Following the Erikson's hypothesis, present research is limited to the study of saints and artists only.
5. Saints can also be from all the eleven major religions, namely, Hinduism, Christianity, Islam, Jainism, Buddhism, Judaism, Jorashtranianism, Shintoism, Taoism, Confucianism and Sikhism. Among all these eleven major religions, Hinduism, Christianity, Buddhism and Jainism have been selected for present research.
6. Artists can also be from a variety of fields like dancing, painting, music, drama, sculpture, Folk-dance, photography etc. Here only painting, music (vocal) and performing arts (of dance and drama) are only selected.
7. Over and above, religion and art, only three demographic variables of sex, age, and education has been selected as concomitant independent variables.

THE PURPOSE: OBJECTIVES:

The major objectives of present research are as under:

1. To study the effect of Sex-role orientation on MH, EC, SEA, and Int.LOC.
2. To study the effect of Type of Person on MH, EC, SEA, and Int.LOC.
3. To study the effect of Type of Religion on MH, EC, SEA, and Int.LOC.
4. To study the effect of Type of Art on MH, EC, SEA, and Int.LOC.
5. To study the effect of Years of Experience on MH, EC, SEA, and Int.LOC.
6. To study the effects of demographic variables like Age, Gender and Education on MH, EC, SEA, and Int.LOC.
7. To examine whether Type of Person affects sex-role orientation, i.e. whether saints and artists are androgynous persons as hypothesized by Joan Erikson.
8. To examine whether Type of Art affects sex-role orientation.
9. To examine whether Type of Religion affects sex-role orientation.
10. To examine whether Years of Experience affects sex-role orientation.
11. To analyze Gender differences in sex-role orientation, androgyny, and other personality variables of MH, EC, SEA, LOC, and PV.
12. To analyze Age differences in androgyny and other personality variables of SEA, MH, EC, LOC, and PV.
13. To study whether androgynous persons are self-actualized.

14. To examine whether androgyny is correlated with mental health and emotional competence.
15. To examine whether androgynous persons are internals or externals on Locus of Control Scale.
16. To examine whether saints represent the 'religious' and the artists represent 'aesthetic' values on Personal Value Questionnaire.
17. To verify whether persons with 'religious' and 'aesthetic' values on PVQ are androgynous as implied by Erikson's hypothesis.
18. To analyze MH, EC, SEA, LOC, Int.LOC, and PV as the correlates of androgyny.
19. To analyze inter-correlations among personality variables like MH, EC, SEA, LOC, and PV.

VARIABLES:

Variables are the operationalizations of the constructs under study. Here we have Psychological Androgyny, Mental Health, Emotional Competence, Locus of Control, and Personal Values as the constructs of present research. When all these constructs are operationalized and measured through particular scales, they become variables. As the problem, scope and the objectives of present research implied the variables have been classified as under:

1. INDEPENDENT VARIABLES:

Independent variables are those variables whose effect is being studied and which constitute the antecedent conditions. Independent variables can also be classified into two types, viz. E-

type and S-type. E-type independent variables are those variables, which are manipulated by experimenter, normally, in Experimental Designs, where the study is done under controlled conditions; while S-type independent variables are the selected, not manipulated variables. When the researcher aims to study the effect of a variable, which he can't manipulate and control but can only select its various values from existing population, the S-type variables are selected. Age, gender, intelligence, mental health, education etc. are such S-type independent variables. S-type independent variables are used in non-experimental or quasi-experimental designs.

In the present research, the S-type independent variables selected by the researcher are as under:

1. Sex-Role Orientation: with its four values as androgynous, masculine, feminine, and undifferentiated

2. Type of Person: with its three values as saints, artists and normals.

3. Type of Religion: with its four values as Hinduism, Jainism Buddhism, and Christianity.

4. Type of Art: with its three values as Music, Painting and Sculpture, Performing Arts (Dance & Drama).

5. Years of Experience: with two values of 20 & less than 20 years and more than 20 years.

6. Sex: with its two values as Males and Female

7. Age: with its three values as 0-25, 26-50 51-75 & above.

8. Education: with its three values as undergraduates, graduates And post-graduates.

2. DEPENDENT VARIABLES:

Dependent variables are those variables upon which the effects of independent variables, is observed. Present research has following dependent variables:

1. Androgyny: as measured by Bem's Sex-Role Orientation Inventory (BSRI).

2. Mental Health: as measured by Mental Health Inventory (MHI) by Dr.Jagdish & Dr.A.K.Srivastav

3. Self-Actualization: as measured by Self-Actualization Inventory (SEAI) by Dr.K.N.Sharma.

4. Emotional Competence: as measured by Emotional Competence Scale by Dr.H.Sharma and Dr.Bharadwaj.

5. Locus of Control: as measured by Rotter's Locus of Control (I/E Scale), Hindi adaptation by Dr.Anandkumar & Dr.S.Srivastav.

6. Personal Values: as measured by Personal Values Questionnaire (PAQ) by Dr.G.P.Sherry & Dr.R.P.Verma.

3. CONTROL VARIABLES:

As present research does not constitute the experimental design, where the experimenter can manipulate and directly control all the extraneous variables, here an attempt to control has been only in an indirect way. As the independent variables of present research are of S-type, here an attempt has been made to control some extraneous variables, as far as possible, in following way:

CONTROL IN SAMPLING:

1. An attempt was made to make the sample most possibly representative. Saints were selected from various types like

leading institutional life, wandering (parivrajaka) and living in the caves of Himalayas too.

2. Even within the single value of religion, the sample of saints was selected from various cults, e.g. Hinduism does not possess any single philosophy. Unity in diversity is the very characteristic of Hindu culture and religion too. Therefore an attempt was made to select saints belonging to different traditions of Hinduism like Vedantins, Pushtimargiya, Swaminirayan, Brahmakumaries, Ramkrishna tradition etc. to make the sample representative as far as possible. Similarly in Christianity also some were catholics, some were Jesuits etc. In Jainism also sample was selected from their different cults. In Buddhism also saints were selected from Kangra district and Dharamshala and at Himachal Pradesh.
3. Artists were also selected from different fields like painting and sculpture, music and dance – drama.
4. To make the results more valid, saints and artists having minimum five years of experience were selected barring only rare exceptions.

CONTROL IN ADMINISTRATION:

1. Subjects were instructed to fill up the questionnaires with a break to avoid fatigue effects.
2. A special attention and effort was made to establish 'rapport' to get honest answers.
3. Subjects were assured of the confidentiality of their answers for their free expressions.

4. Subjects were also given freedom to hide their identity so that not 'good' but 'true' answers can be achieved.
5. Subjects were not given any fixed time limit to fill up their questionnaires to avoid any hasty replies.
6. Researcher allowed complete freedom and privacy to subjects to avoid experimenter's effect.
7. Like the subjects from the caves of Himalayas and for Buddhist monks, researcher used personal interview method to get the proper answers on questionnaires.
8. As the sample constituted from various religions and regions, an attempt was made to get all the questionnaires in Hindi, which represents the most common and representative National language.
9. Wherever it was impossible to get the standardized Hindi or English version of the scale, three experts knowing both the languages translated it and reliability for the translated versions was calculated.
10. For the saints of Christianity separate standardized English versions of the questionnaires were prepared and administered.

CONTROL IN DATA ANALYSIS:

1. The scores were calculated by the researcher and were analyzed through computer software of SPSS 13th version to avoid human errors.
2. The technique of "statistical control" of variables like "partial and multiple correlation" was also used to control the effect of third extraneous variable in correlational analysis.

In short, because present research constituted non-experimental, quasi-experimental and correlational research design, the control of variables through manipulation was impossible. Even then, an attempt was made to control as many extraneous variables as it was possible, within the limits of time, money and scope of the research, to avoid 'confounding' and to get the maximum possible valid and reliable results.

HYPOTHESES:

The hypotheses of this quasi-experimental and correlational research design, classified according to the statistical analysis, can be stated as under:

Hypotheses for ANOVA- Analysis:

1. There are no significant differences in the mental health of subjects with different sex-role orientations.
2. There are no significant differences in the mental health of saints, artists, and normals
3. There are no significant differences in the mental health of subjects with different educational levels.
4. There are no significant differences in the mental health of saints with different types of religions.
5. There are no significant differences in the mental health of artists with different types of art.
6. There are no significant differences in the mental health of saints with different years of experience.
7. There are no significant differences in the mental health of artists with different years of experience.

8. There are no significant differences in the mental health of subjects of different age groups.
9. There are no significant differences in the mental health of males and females.
10. There are no significant differences in the emotional competence of subjects with different sex-role-orientations.
11. There are no significant differences in the emotional competence of saints, artists, and normals.
12. There are no significant differences in the emotional competence of subjects with different educational levels.
13. There are no significant differences in the emotional competence of saints with different types of religions.
14. There are no significant differences in the emotional competence of artists with different types of art.
15. There are no significant differences in the emotional competence of saints with different years of experience.
16. There are no significant differences in the emotional competence of artists with different years of experience.
17. There are no significant differences in the emotional competence of subjects of different age groups.
18. There are no significant differences in the emotional competence of males and females.
19. There are no significant differences in the self-actualization of subjects with different sex-role orientations.
20. There are no significant differences in the self-actualization of saints, artists, and normals.

21. There are no significant differences in the self-actualization of subjects with different educational levels.
22. There are no significant differences in the self-actualization of saints with different types of religions.
23. There are no significant differences in the self-actualization of artists with different types of art.
24. There are no significant differences in the self-actualization of saints with different years of experience.
25. There are no significant differences in the self-actualization of artists with different years of experience.
26. There are no significant differences in the self-actualization of subjects of different age groups.
27. There are no significant differences in the self-actualization of males and females.
28. There are no significant differences between the subjects with internal and external locus of control with respect to their sex-role orientations.
29. There are no significant differences in the internality of locus of control of the subjects with different sex-role orientations.
30. There are no significant differences between the subjects with internal and external locus of control with respect to the Type of Person.
31. There are no significant differences in the internality of locus of control of saints, artists, and normals.
32. There are no significant differences between the subjects with internal and external locus of control with respect to their educational levels.

33. There are no significant differences in the internality of locus of control of subjects with different educational levels.
34. There are no significant differences between the subjects with internal and external locus of control with respect to the type of religion.
35. There are no significant differences in the internality of locus of control of saints with different types of religions.
36. There are no significant differences between the subjects with internal and external locus of control with respect to the type of art.
37. There are no significant differences in the internality of locus of control of artists with different types of art.
38. There are no significant differences between the subjects with internal and external locus of control with respect to their years of experience.
39. There are no significant differences in the internality of locus of control of saints with different years of experience.
40. There are no significant differences in the internality of locus of control of artists with different years of experience.
41. There are no significant differences in the internality of locus of control of the subjects with respect to their years of experience.
42. There are no significant differences between the subjects with internal and external locus of control with respect to their age.

43. There are no significant differences in the internality of locus of control of the subjects of different age groups.
44. There are no significant differences between the subjects with internal and external locus of control with respect to their gender.
45. There are no significant differences in the internality of locus of control of the males and females.

Hypotheses for Chi-squares:

Hypotheses for Sex-Role Orientation Analysis:

46. There are no significant differences in the sex-role orientations of saints, artists, and normals.
47. There are no significant differences in the sex-role orientations of saints with different types of religions.
48. There are no significant differences in the sex-role orientations of artists with different types of art.
49. There are no significant differences in the sex-role orientations of subjects with different age groups.
50. There are no significant differences in the sex-role orientations of males and females.
51. There are no significant differences in the sex-role orientations of subjects with different educational levels.
52. There are no significant differences in the sex-role orientations of subjects with different years of experience.
53. There are no significant differences in the sex-role orientations of subjects with different personal values.
54. There are no significant differences in the sex-role orientations of subjects with external and internal locus of control.

Hypotheses for Androgyny analysis:

55. There are no significant differences in the androgyny of subjects with different age groups.
56. There are no significant differences in the androgyny of males and females.
57. There are no significant differences in the androgyny of subjects with different educational levels.
58. There are no significant differences in the androgyny of saints, artists, and normals.
59. There are no significant differences in the androgyny of saints with different types of religions.
60. There are no significant differences in the androgyny of artists with different types of art.
61. There are no significant differences in the androgyny of subjects with different years of experience.
62. There is no significant correlation between androgyny and mental health.
63. There is no significant correlation between androgyny and emotional competence.
64. There is no significant correlation between androgyny and self-actualization.
65. There is no significant correlation between androgyny and locus of control.
66. There is no significant correlation between androgyny and internality of locus of control.
67. There is no significant correlation between androgyny and personal values.
68. There is no significant correlation between androgyny and positive self-evaluation.

69. There is no significant correlation between androgyny and perception of reality.
70. There is no significant correlation between androgyny and integration of personality.
71. There is no significant correlation between androgyny and autonomy.
72. There is no significant correlation between androgyny and group-oriented attitude.
73. There is no significant correlation between androgyny and environmental mastery.
74. There is no significant correlation between androgyny and adequate depth of feeling.
75. There is no significant correlation between androgyny and adequate expression and control of emotions.
76. There is no significant correlation between androgyny and ability to function with emotions.
77. There is no significant correlation between androgyny and ability to cope with problem emotions.
78. There is no significant correlation between androgyny and encouragement of positive emotions.

Hypotheses for Value-analysis:

79. There are no significant differences in the personal values of saints, artists, and normals.
80. There are no significant differences in the personal values of saints with different types of religions.
81. There are no significant differences in the personal values of artists with different types of art.

82. There are no significant differences in the personal values of subjects of different age groups.
83. There are no significant differences in the personal values of males and females.
84. There are no significant differences in the personal values of subjects with different educational levels.
85. There are no significant differences in the personal values of subjects with different years of experience.
86. There is no significant correlation between personal values and mental health.
87. There is no significant correlation between personal values and self-actualization.
88. There is no significant correlation between personal values and emotional competence.
89. There is no significant correlation between personal values and locus of control.
90. There is no significant correlation between personal values and internality of locus of control.

Hypotheses for Concomitant Correlational analysis:

91. There is no significant correlation between mental health and self-actualization.
92. There is no significant correlation between mental health and emotional competence.
93. There is no significant correlation between mental health and locus of control.
94. There is no significant correlation between mental health and internality of locus of control.

95. There is no significant correlation between self-actualization and emotional competence.
96. There is no significant correlation between self-actualization and locus of control.
97. There is no significant correlation between self-actualization and internality of locus of control.
98. There is no significant correlation between emotional competence and locus of control.
99. There is no significant correlation between emotional competence and internality of locus of control.

RESEARCH DESIGN:

As Kerlinger (1973) defines “Research Design is the plan, structure and strategy of investigation conceived so as to obtain answer research questions and to control variance.” (Kerlinger 1973:300)

Thus, research design has two purposes, i.e. (1) to provide research answers and (2) to control variance.

(1). TO PROVIDE RESEARCH ANSWERS:

Research designs are invented and planned to enable the researcher to get the answers of the research questions as validly, objectively, accurately and economically as possible. Research designs are worked out carefully to get the dependable and valid answers to the research questions as epitomized by the hypotheses.

In short, research design tells us ‘ in a sense what observations to make, how to make them, and how to analyze the

quantitative representations of the observations. (Kerlinger 1973: 301).

(2). TO CONTROL VARIANCE:

As pointed out by Kerlinger, by constructing an efficient research design, the researcher controls variance of the research in following three ways:

- To maximize the variance of the variables of the substantive research hypothesis.
- To control the variance of extraneous variables.
- To minimize the error or random variance like so called errors of measurements, slips of pen etc.

As the survey of research designs described in various textbooks and depicted on various websites suggest, the research designs, in general, can be classified into two groups:

1. Qualitative Research Designs.
2. Quantitative Research Designs.

1. QUALITATIVE RESEARCH DESIGNS.

Qualitative Research Designs are concerned with describing the phenomena, as they exist. 'Naturalistic Observations' constitute Qualitative Research Design. Qualitative Research Design also includes historical, ethnographic and case studies methods. Naturalistic inquiry, Hermeneutic analysis, participant observations, ethnography and evaluation research – All are qualitative research designs.

2. QUANTITATIVE RESEARCH DESIGNS:

"Quantitative Research Design" focuses on 'outcomes', while "Qualitative Research Design" focuses on 'process'. Quantitative Research Design involves collecting 'numbers' and Qualitative is concerned with collecting 'observations'. The difference between qualitative and quantitative research designs can be schematically shown as under:

Table 1: Comparison of features of Quantitative Qualitative approaches to research and

Both are systematic in their approach	
Objective	Subjective
Deductive	Inductive
Generalisable	Not generalisable
Numbers	Words

Quantitative Research Designs can also be classified into two groups:

2.1. Experimental Designs

2.2. Non-experimental Designs

2.1. Experimental Designs:

Experimental Designs aim to manipulate and control variables to establish cause-and-effect relationships between the variables. The experimentation in controlled conditions is called "Experimental Designs". Experimental design can also be called RCT (Randomized Control Trial), which constitutes the true

experiment and the paradigm for scientific method in research. Experimental designs are set up to allow the greatest amount of control possible so that causality may be examined closely. The three essential elements of experimental design are:

- Manipulation: The researcher does something to at least some of the participants in the research
- Control: The experimenter introduces one or more controls over the experimental situation.
- Randomization: The experimenter assigns participants to different groups on a random basis.

(Adapted from Polit & Hungler, 4th Edn. 1997)

The classic example of the experimental design is the before-after design or pre-test post-test design. This is perhaps the most commonly used experimental design.

(http://www.fortunecity.com/greenfield/grizzly/432/rra2.htm)

2.2. Non-Experimental Designs:

Non-experimental Research Designs, lacking direct manipulation, control, and randomization, can be classified into following three sub-types:

2.2.1. Survey

2.2.2. Quasi-Experimental Research Design

2.2.3. Correlational Research.

2.2.1. Survey:

Though surveys yield outcomes in numbers and hence are quantitative, they do not establish causality. Normally, surveys

involve collection of data from some target population usually being large-scale.

2.2.2. Quasi-Experimental Research Designs:

When the researcher is interested in observing the effect of one variable upon the other but is unable to control and manipulate the variable under study, then the quasi- experimental research design is used. In quasi-experimental design the researcher does not manipulate the independent variable, (E-type), but 'selects' its values from the pre-existing population (S-type). This is the reason, why quasi-experimental research designs are also known as 'ex-post-facto' research designs. The literal meaning of 'ex-post-facto' is from 'what is done afterwards'. It means something done or occurring after an event with a retroactive effect on the event, e.g. the effect of sex has long previously been already decided at the time of birth. In short, study of S-type, independent variables involve quasi-experimental, or ex-post facto research designs.

2.2.3.Correlational Research:

In experimental research, the experimenter is interested in establishing 'causality' and the variables are under control and manipulation. In quasi-experimental research design, the researcher is interested in observing the 'causality' but the independent variables cannot be manipulated and controlled.

In correlational research the researcher is not interested primarily in establishing the casual relationships between the variables, rather he is interested only in the association between

two variables, which may or may not be causal. In correlational research, the researcher is interested to observe whether or not two or more variables are related, regardless of whether that relationship is causal.

Now, being consistent to the problem and purpose of present research, here quasi-experimental and correlational research designs are selected. As present research involves observing the effects of various S-type independent variables like Type of Person, Type of Religion, Type of Art, Sex, Age, and Education, the quasi-experimental research design is selected here.

The Type of Person has got *three* values of saints, artists, and normals. Type of Religion has got *four* values of Hinduism, Christianity, Buddhism, and Jainism. Type of Art has got *three* values of painting/sculpture, music and dance/drama, Sex has got *two* values of Males and Females, Age has got *three* values of 25-40, 40-55, 55-70 and finally Education has got *three* values of undergraduates, graduates and postgraduates. This being so, quasi-experimental research design can also be said to be Factorial Design. As each cell of this factorial design contained separate 30 subjects, present research can also be said to be "Separate Group Design" as against "Single Group Design" used in Before-After Research Designs. Various combinations of the various factors, giving rise to various factional designs, basically stem from three basic units of the design of present research, which can be illustrated in tabular form as under:

UNIT 1: SAINTS:

	Hinduism	Christianity	Jainism	Buddhism
M	N = 32	N = 29	N = 34	N= 32
F	N = 31	N = 29	N = 31	N=31
	N=63	N=58	N=65	N=63

N=249

UNIT: 2 ARTISTS:

	Music	Painting/sculpture	Dance/drama
M	N = 31	N = 31	N = 25
F	N = 31	N = 30	N = 32

N= 180

UNIT: 3 NORMALS

	Males	Females
	N = 56	N = 76

N=132

TOTAL N= 561

CORRELATIONAL RESEARCH DESIGN:

The primary goal of present research is to study some personality correlates of androgyny among saints and artists. This being so, the research design primarily suitable for present research is the Correlational Research Design. The Correlation Matrix to be evolved after calculating various correlations among the personality variables can be illustrated as under:

	X_1	X_2	X_3	X_4	X_5	X_6	X_7
X_1	--	r_{12}	r_{13}	r_{14}	r_{15}	r_{16}	r_{17}
X_2	r_{21}	--	r_{23}	r_{24}	r_{25}	r_{26}	r_{27}
X_3	r_{31}	r_{32}	--	r_{34}	r_{35}	r_{36}	r_{37}
X_4	r_{41}	r_{42}	r_{43}	--	r_{45}	r_{46}	r_{47}
X_5	r_{51}	r_{52}	r_{53}	r_{54}	--	r_{56}	r_{57}
X_6	r_{16}	r_{26}	r_{36}	r_{46}	r_{57}	--	r_{67}
X_7	r_{17}	r_{27}	r_{37}	r_{47}	r_{57}	r_{67}	--

Where X_1 = Androgyny

X_2 = Mental Health

X_3 = Self-Actualization

X_4 = Emotional Competence

X_5 = Locus of Control

X_6 = Internality of Locus of control

X_7 = Personal Values

On the basis of this correlation matrix, all the first-order partial correlations while statistically controlling every third variable, could be calculated.

In short, present research employs quasi-experimental and correlational research designs.

THE SAMPLE:

The selection of the sample in each cell of the above stated factorial design was based on non-probabilistic purposive sampling. Saints were operationally defined as the bonafide renunciates leading the renunciate life minimum for 5 years. Similarly, artists were operationally defined as those having their

careers in the respective field of art, minimum for 5 years. Normals were defined as Non-saints and non-artists.

THE TOOLS:

The tools selected and used to measure the six dependent variables are under:

1. BEM'S SEX-ROLE INVENTORY (BSRI):

Various Masculinity/Feminity tests existed to measure Androgyny, among which Bem's Sex-Role Orientation Inventory (BSRI) and Spence's Personal Attribute Questionnaire (PAQ) are the main ones. Both these tests focus on Androgyny and are derived from rigorous scientific basis. Out of these two dominant and popular tools to measure Androgyny, the researcher preferred BSRI on following grounds:

1. Formulation of BSRI underlied too much scientific labor at every stage.
2. BSRI was found to be more exhaustive and encompassing so far as personality attributes of masculinity and feminity are concerned.
3. Researcher found BSRI to be easier from subjects's point of view in describing their own M/F attributes to indicate on 7-point scale.
4. The theoretical difference underlying BSRI and PAQ led researcher to prefer BSRI, because the researcher agreed with Bem's Unidimensional Approach, rather then with Spence's Multidimensional Approach as discussed in the chapter on the Theoretical Background.

All these above stated reasons led the researcher to prefer BSRI to measure Androgyny. Even with BSRI, the unabridged and abridged versions were available, out of which the researcher preferred unabridged original version of BSRI with 60 adjectives for more exhaustive analysis and to get more valid reasons.

Secondly, Indian adaptation of the abridged version of BSRI by Uma Rao, Gupta and Murthy (1982) retaining in final form, the 30 items thought to be more relevant to our culture, was also available. Its translation in Gujarati by Dr.Mehta (1992) was available. Even then, the researcher preferred Bem's original BSRI seeing the conceptual basis and empirical depth of Bem's original work. Besides, review of literature showed that most of the researches on Sex-role orientation all over the world have used BSRI. So make the comparison more reliable and meaningful here, BSRI original version only was selected.

The coefficient Alpha, as an index of the reliability of the Original BSRI with 60 adjectives, which was used here, was .78 for Feminity and .86 for Masculinity (Stanford, 1978).

This Original inventory was in English and was used for Christian saints, knowing English better than Hindi in present research. However, the other subjects were from different traditions and states of India. So Original BSRI was given to three experts knowing Hindi and English both and was translated into Hindi. Most suitable and accurate translations of the items, from psychology point-of-view, were selected and thus final Hindi version of BSRI was prepared. The Cronbach's Alpha of the Hindi version, calculated through SPSSx 13.0 version for BSRI, was .87, for Masculinity it was .82, and for feminity it was .69. The

correlation between the Hindi and the English version, calculated manually, was .68. Reliability results can be tabulated as under:

Table-1 Reliability Coefficients for BSRI

Reliability	Masculinity	Feminity	TOTAL
Original BSRI (English)	.86	.78	
BSRI (Hindi Version)	.83	.73	.88

Reliability (SEAI)	N	r	Index of Reliability
Parallel Form (Eng. & Hindi)	60	.68	.82
Split-Half (Guttman coefficient)	60	.74	.86
Cronbech's Alpha	60		.88

(See Appendices for Reliability results of SPSSx for BSRI)

2. MENTAL HEALTH INVENTORY:

For the measurement of Mental Health, two instruments were easily available. Mental Health checklist by Pramod Kumar and Mental Health Inventory by Dr.Jagdish and Dr.A.K.Srivastav. Mental Health checklist was very sketchy, included only a few words to indicate Mental Health, while Mental Health Inventory (MHI) constituted a detailed questionnaire to measure more aspects of mental health. MHI measured MH through six components, namely, Positive Self-evaluation (PSE), Perception of

Reality (PR), Integration of Personality (IP), Autonomy (AUT), Group-oriented Attitude (GOA), and Environmental Mastery (EM). Thus MHI used to give more detailed and compartmentalized measurement of Mental Health.

Secondly, Mental Health Check list included some physiological measures too, in which researcher was less interested. Although ill-mental health does reflect through somatic ailments, here researcher was more interested in psychological aspects of Mental Health, which MHI yielded.

Thirdly, Mental Health Check list represented the measurement of negative aspects of mental health primarily, while MHI included the measurement of positive psychological aspects of Mental Health.

Fourthly, MHI was available in standardised form, in English and Hindi, both the versions, which was the requirement of the research. So practically also use of MHI was more economical saving time and energy.

For all these above-stated reasons, here MHI was selected as a tool to measure Mental Health. The authors themselves had availed the Hindi version and the English version of MHI, both of which were used here. The Split-half reliability of the six components of Mental Health and the over all reliability of MHI were as under:

Table –2 Reliability Coefficients

Components of Mental Health	Reliability Index
Positive Self-Evaluation	.75
Perception of Reality	.71
Integration of Personality	.72
Autonomy	.72
Group- Oriented Attitudes	.74
Environmental Mastery	.71
Over All	.73

The Construct Validity of MHI was determined by finding correlation between scores on MHI and General Health Questionnaire (Goldberg, 1978 from Manual of MHI). It was found to be negative correlation of -.54. High score on GHQ indicated poor MH.

Besides the inventory was validated against Personal Adjustment Scale (a sub-scale of S-D Inventory) developed by Pastonjee (1973). The positive correlation between the two was .57 suggesting moderate validity.

3. SELF-ACTUALIZATION INVENTORY (SEAI)

For the measurement of Self-Actualization and Locus of Control, the only available tools in Hindi were Self Actualization Inventory by Dr.K.N.Sharma and The test-retest reliability of SEAI was .85. The correlation of .27 was found against Kakker's Self-Acceptance Inventory and .29 with NCERT's Self-Perception Inventory, both of which represented only a fragment of SEA. SEAI

was available in Hindi version only. But as per the requirement in present research, its English translation through three experts was prepared and finalized through above stated procedure. The Cronbach's Alpha as an index of reliability of the English version of SEAI, calculated through SPSSx 13.0 version was .89 and Split-Half reliability of SEAI, English version was .88. Reliability results can be tabulated as under:

Reliability (SEAI)	**N**	**r**	**Index of Reliability**
Parallel Form (Eng. & Hindi)	60	.52	.72
Split-Half (Guttman coefficient)	60	.81	.90
Cronbech's Alpha	60		.89

(See Appendices for Reliability results of SPSSx for SEAI)

4. ROTTER'S LOCUS OF CONTROL SCALE (I-E SCALE):

Rotter's Locus of Control Scale's Hindi adaptation by Dr. Anandkumar & Dr. S.N. Srivastava was used in present research.

The Test-Retest reliability of the I-E Scale- Hindi adaptation – was .85 and Split-Half reliability was .88. Rotter reported good discriminant validity for the scale indicated by low correlations with such variables such as intelligence, social desirability and political affiliation. (Manual for Hindi version of Rotter's LOC Scale)

The same was got translated in English by the researcher through the same above-stated procedure and was finalized. The Split-Half reliability of the translated English version of I-E Scale

was found to be .59 and Cronbach's Alpha was .63. The correlation between the Hindi and the English version, calculated manually, was .79. Reliability results can be tabulated as under:

Reliability (LOC Scale)	N	r	Index of Reliability
Parallel Form (Eng. & Hindi)	70	.79	.88
Split-Half (Guttman coefficient)	70	.42	.65
Cronbech's Alpha	70		.63

(See Appendices for Reliability results of SPSSx for LOC)

5. Emotional Competence:

To analyze the emotional correlate of Androgyny three, aspects of emotion were considered. Emotional Maturity, Emotional Intelligence, and Emotional Competence. Emotional Maturity was a much more developmental concept, Emotional Intelligence was, of course, a newly emerged positive concept. Researcher tried to get Emotional Intelligence scale, if at all developed, but could not trace any such standardized scale. Emotional Competence represented a positive personality dimension. So researcher preferred to use Emotional Competence Scale by Dr.Harish Sharma and Dr.Rajiv Lochan Bhardwaj. This test was also found to have been discussed in the abstracts, published in Psycho Info 1990 by APA. The standardized Hindi and English version of these EC scale were also easily available. For this reason, the said EC scale was selected.

6. PERSONAL VALUE QUESTIONNAIRE (PVQ):

Finally, Sherry and Verma's Personal Value Questionnaire was selected which used to measure ten different types of values. Instead of a scale based on six values of Spranger, this PVQ measured 10 values in more detail. So, researcher preferred PVQ for measuring value-correlate of Androgyny. Ten values measured by PVQ were Religious Value, Social Value, Democratic Value, Aesthetic Value, Economic Value, Knowledge Value, Hedonistic Value, Power Value, Family Prestige Value, and Health Value. The Test-Retest reliabilities for these values were as under:

	Values	**Reliability (3-months gap)**
1.	Religious Value	.62
2.	Social Value	.66
3.	Democratic Value	.57
4.	Aesthetic Value	.65
5.	Economic Value	.70
6.	Knowledge Value	.63
7.	Hedonistic Value	.54
8.	Power Value	.53
9.	Family Prestige Value	.85
10.	Health value	.64

THE PROCEDURE:

Present research aimed at the analysis of some personality correlates of androgyny among saints and artists. The main questionnaire included six sub-questionnaires, namely, Bem's Sex-Role Inventory (BSRI), Mental Health Inventory (MHI), Self-Actualization Inventory (SEAI), Emotional Competence Scale (EC

Scale), Rotter's Locus of Control Scale (I-E Scale) and Personal Value Questionnaire (PVQ). Because every subject was expected to give 'true', not 'good' answers on all the six questionnaires, special care was taken to establish rapport and assure every subject of the confidentiality of their responses. Especially in case of eminent saints and artists, this assurance of confidentiality was of much relevance. Ss included eminent disciples of Pt. Jasraj in music, eminent tabla-players, eminent nationally-accreditated male dancers, famous painters and big awards-winner sculputor whose very big statues and sculptures stand on the famous cross-roads of Gujarat, saints of reputed institution etc. This being so, special care was taken for rapport and confidentiality to get their co-operation. In number of cases, researcher herself filled the responses from the Ss through interview method.

For the data of Hindu saints, researcher visited various places of Gujarat, Haridwar, Rishikesh, and Gangotri to have data from some of the saints living in the caves of Himalayas. To collect the data from the bonafied saints of Buddhism, researcher visited various Buddhist monasteries and nunnery at Mcleodganj, Dharamshala and Kangra district at Himachal Pradesh. For female Buddhist saints, Dolma Ling Nunnery, Kangra District, H.P. was visited and the responses of Tibetan Buddhist nuns were taken through personal interview with the help of interpreter. Similarly, for male Buddhist saints, GYUTO Tantric Buddhist monastery at Chamunda, Kangra Dist., H.P. and the Nechung Drayangling Monastery at Macleodganj, Dharamshala. H.P. were contacted and subjects' responses were obtained. All these Buddhist institutions, contacted for present research are headed by H.H. the Dalai Lama. It was wonderful experience for researcher to be with

Tibetan Buddhist saints, who were found to be very honest in answering the questionnaires, were most innocent, transparent and cooperative to a Hindu researcher without any suspicion. The data from Christian male and female saints were obtained from Christian missionaries working in Ahmedabad and Rajkot. Jain male and female saints were contacted from different traditions of Jainism at Ahmedabad and Koba, where famous research institute on Jainism is there. Artists of music, painting/sculpture, and Dance/drama were from Ahmedabad, Jamnagar, and Bhavnagar. In case of educated Ss who can fill the questionnaire themselves, after the rapport, researcher explained all the sub-questionnaires with instruction printed on them respectively and gave them time to answer. Because the questionnaire was quite long with six sub-scales, researcher had given a week period to fill the questionnaire leisurely at their convenience to avoid fatigue and boredom effect. However, subject was instructed to fill at least one questionnaire at a time to avoid discontinuity. The non-saint and non-artist normal population, selected for comparison was from the bank employees, LIC employees, government servants, and housewives. In this way responses of saints of four religion, namely, Hinduism, Buddhism, Christianity and Jainism; artists of three fields, namely, music, Painting/sculpture and dance/drama and the normals- was collected then the scores of each subject was computed for each questionnaire as per the respective manuals and finally statistical analysis was done through SPSS 13.0 version and the results were interpreted against the hypotheses.

SCORING AND STATISTICAL ANALYSIS:

Scoring:

The responses of total 561 subjects on six different sub-scales were scored according to the respective manuals of each scale as under:

1. Androgyny Scoring:

On Bem's Sex-Role Inventory, each subject evaluated his/her self on seven-point scale on each of the 60 items, out of which 20 items were Masculine, 20 items were Feminine and 20 items were neutral adjectives. The total scores for 20 Masculine and 20 Feminine adjectives were computed separately, and Mean score for Masculinity and Mean score for Feminity for each subject was calculated. The norm given by BEM for Masculine mean score was 4.95 and for Feminine mean score was 4.90. Each subject's mean score for Masculinity was compared with 4.95 and mean score for Feminity was compared with 4.90. Then each subject was classified into any of the following four categories as under:

1. Androgynous: High Masculinity, High Feminity (If S's mean score for Masculinity was higher than 4.95 and Feminity score was higher than 4.90)
2. Masculine: High Masculinity, Low Feminity (If S's mean score for Masculinity was more than 4.95 but mean score for Feminity was less than 4.90)
3. Feminine: High Feminity, Low Masculinity (If S's mean score for Feminity was more than 4.90 but mean score for Masculinity was less than 4.95)

4. Undifferentiated: Low Feminity, Low Masculinity (If S's mean score for Feminity and for Masculinity both were less than 4.90 and 4.95 respectively).

After each subject was classified in one of the above-stated four categories, each subject was further classified as Androgynous and Non-androgynous to make not only SRO-analysis but separate Androgyny analysis also possible. All those Ss who were categorized in any of the above-stated category other than the Androgynous, was classified as Non-androgynous.

2. Mental Health scoring:

To measure the Mental Health of the subject, Mental Health Inventory by Dr. Jagdish and Dr.A.K.Srivastava was used. The inventory contained 56 sentences upon which each subject was expected give any one of the four alternatives given for each statement, namely, Always, Often, Rarely and Never. The inventory had Positive and Negative items. Positive items were scored as 4,3,2,1 for Always, Often, and Rarely and Never responses; while negative items were scored 1,2,3,4 for Always, Often, and Rarely and Never responses. Subject's scoring for the six components of Mental Health, namely, Positive Self-evaluation (PSE), Perception of Reality (PR), Integration of Personality (IP), Autonomy (AUT), Group-Oriented Attitude (GOA), and Environmental Mastery (EM) was computed as per the manual. Finally on the basis of total score obtained by summing the score of six components, S's Mental Health category was also designates as per the Norms which was as under:

MH Score	Category
196.02 & Above	Very Good
175.14- 196.02	Good
154.26-175.14	Average
133.38-154.26	Poor
Below 133.38	Very Poor

3. Emotional Competence Scoring:

To measure the Emotional Competence, A Scale for Emotional Competence by H.C.Sharma and R. Bhardwaj was used. EC Scale contained 30 items and on each item, subject was expected to give response on any one of the five alternatives. Score of 1,2,3,4,5 was given from upper to lower end in the alternatives. Subject's raw score and corresponding Z-score was computed for each of the five components of EC, namely, Adequate Depth of Feeling (ADF), Adequate Expression and Control of Emotions (AEC), Ability to Function with Emotions (AFE), Ability to Cope with Problem Emotions (ACPE), and Encouragement of Positive Emotions (EPE). Then, with help of Manual, total Z-score for EC was computed and on the basis of total EC score Z-score), T-scores corresponding to EC were found through Manual. Finally, on the basis of T-scores for EC, each subject was given a particular category of EC as per the Norms, which was as under:

Range of T-Scores:	Category
70 & Above	Highly Competent
60-69	Competent
40-59	Average
30-39	Incompetent
29 & Below	Highly Incompetent

4. Self-Actualization Scoring:

To measure the Self-actualization of the subject, SEAI by Dr. K.N. Sharma was given to each subject. SEAI had 75 items with each item having three point options of Never, Often and Mostly. Each item was given 1,2,3 score respectively for Never, Often and Mostly. S's total score on each item was summed up and on the basis of this total score subject was categorized as High, Medium and Low as under;

- High SEA……..Raw Score 187+
- Medium SEA…Raw Score 163-186
- Low SEA……..Raw Score 162—

5. Locus of Control Scoring:

To measure S's LOC, Rotter's LOC Scale (I-E Scale) by Anandkumar was used. The LOC scale had 29 items out of which six items were filler items. Each item had one external and one internal LOC option. Subject had to tick either of the two options. S's total external ticks and total internal ticks were calculated and whichever was higher, suggested that category of the subject on LOC, e.g. subject had made 10 ticks on external option and 13 ticks on internal LOC then, subject was as categorized as Internal

LOC. As more than 80% of the subjects were found Internals, each S's Internality score was further calculated, e.g. in above example, S's Internality of LOC was scored as 13. But suppose subject has scored 13 on External then he would be categorized as External LOC but his internality score would be 10. In this way, each subject was given Internality of LOC score.

6. Personal Value Scoring:

To categorize the subject by which of the 10 values he lives, he is measured on Personal Value Questionnaire (PVQ) by Dr. (Mrs.) G.P. Sherry and Prof. R.P.Verma. The scores of the subject with corrections suggested in manual, showed S's preference for the hierarchy of values. The Ss were classified into three categories of Religious, Aesthetic, and the Other- as per Erikson's hypothesis.

In this way, scoring of each subject on each sub-questionnaire was done and final data file for SPSS 13.0 version was prepared, relevant statistics were applied and obtained results were interpreted and discussed.

STATISTICAL ANALYSIS:

Present research constituted a study of some personality correlates of androgyny among saints and artists. Total eight independent variables studied here were:

1. Sex-Role Orientation (SRO): with four values as Androgynous, Masculine, feminine and Undifferentiated.
2. Type of Person (TP): with three values as Saints, Artists and Normals.

3. Type of Religion (TR): with four values as Hinduism, Christianity, Jainism and Buddhism.
4. Type of Art (TA): with three values as Dance-drama, Painting-sculpture and Music.
5. Age: with three values as 1-25, 26-50 and 51-75 & above.
6. Gender: with two values as Male and Female.
7. Educational Level: with four values as Under Graduate, Graduate, Double and/or Postgraduate and More than Post-Graduate.
8. Years of Experience: with two values as 20 or less than 20 and More than 20.

All these independent variables were analyzed with reference to Six dependent variables; namely, Mental Health (MH), Self-actualization (SEA), Emotional Competence (EC), Locus of Control (LOC), Internality of Locus of control (Int.Loc), Personal Values (PV) .Of these six dependent variables; MH, SEA, EC and Int.Loc yielded the results in score-form. Therefore, different ANOVA were performed for the analysis of the data of these four dependent variables with respect to above-stated eight independent variables.

As the independent variables of Gender and Years of Experience had only Two values, Independent samples T-test was employed for comparing the Means of these two variables on the four above-stated dependent variables with scores.

LOC and PV yielded results into category form. Therefore, the results of these two variables on all the eight independent variables with categories were analyzed through Chi-squares with cell-wise percentages to make comparisons and also through Contingency Co-efficients.

As present research focuses on Androgyny, the SRO-results were separated into two values of Androgynous and Non-androgynous SRO and then all the personality correlates of Androgyny were studied through correlational analysis, which was made primarily by computing various Partial Correlations and also Pearson and Eta correlations as and when required.

Because all these variables are personality variables, they all to a certain extent affect each other. The correlation of one particular personality variable with Androgyny may confound with the effects of other personality variables too. The correlation of any one variable with the other may underlie the effect of any third variable. Thus in such case of overlapping, the effect of third variable has been partialled out through the method of statistical control of Partial Correlation. As Richard Lowry (1999) says,

"Partial correlation is a procedure that allows us to measure the region of three-way overlap precisely, and then to remove it from the picture in order to determine what the correlation between any two of the variables would be (hypothetically) **if** they were not each correlated with the third variable. Alternatively, you can say that partial correlation allows us to determine what the correlation between any two of the variables would be (hypothetically) **if** the third variable were held constant. The partial correlation of X and Y, with the effects of Z removed (or held constant), would be given by the formula $r_{xy.z}$ or $r_{xz.y}$ or $r_{yz.x.}$". (http://www. rechardlowery).

Thus to have more 'pure' correlation between any two personality variables selected here, all the third variables are statistically controlled one-by-one through the method of Partial Correlation.

The whole statistical analysis, made through SPSSx 13.0 version, can be summarized in tabulated form as under:

Statistical Analysis

OUTPUT NO.	HYPOTHESIS NO.	INDEPENDENT VARIABLES	DEPENDENT VARIABLES	STATISTICAL TOOLS USED
MH ANALYSIS				
1	1- 3	SRO x TP x EDU	MH	4x3x4 ANOVA
2	4	SRO x TR x EDU	MH	4x3x4 ANOVA
3	5	SRO x TA x EDU	MH	4x3x4 ANOVA
4	6	TR x YEARS	MH	3 x 2 ANOVA
5	7	TA x YEARS	MH	3 x2 ANOVA
6	8	AGE	MH	OneWayANOVA
7	9	GENDER	MH	T-TEST
EC ANALYSIS				
8	10-12	SRO x TP x EDU	EC	4x3x4 ANOVA
9	13	SRO x TR x EDU	EC	4x3x4 ANOVA
10	14	SRO x TA x EDU	EC	4x3x4 ANOVA
11	15	TR x YEARS	EC	3 x 2 ANOVA
12	16	TA x YEARS	EC	3 x2 ANOVA
13	17	AGE	EC	OneWayANOVA
14	18	GENDER	EC	T-TEST
SEA ANALYSIS				
15	19-21	SRO x TP x EDU	SEA	4x3x4 ANOVA
16	22	SRO x TR x EDU	SEA	4x3x4 ANOVA
17	23	SRO x TA x EDU	SEA	4x3x4 ANOVA

OUTPUT NO.	HYPOTHESIS NO.	INDEPENDENT VARIABLES	DEPENDENT VARIABLES	STATISTICAL TOOLS USED
18	24	TR x YEARS	SEA	3 x 2 ANOVA
19	25	TA x YEARS	SEA	3 x2 ANOVA
20	26	AGE	SEA	OneWayANOVA
21	27	GENDER	SEA	T-TEST
22	28-33	SRO x TP x EDU	Int.LOC	4x3x4 ANOVA
23	34-35	SRO x TR x EDU	Int.LOC	4x3x4 ANOVA
24	36-37	SRO x TA x EDU	Int.LOC	4x3x4 ANOVA
25	38-39	TR x YEARS	Int.LOC	3 x 2 ANOVA
26	40-41	TA x YEARS	Int.LOC	3 x2 ANOVA
27	42-43	AGE	Int.LOC	OneWayANOVA
28	44-45	GENDER	Int.LOC	T-TEST
SRO ANALYSIS				
29	46	SRO	TP	Chi-Square, %, C
30	47	SRO	TR	Chi-Square, %, C
31	48	SRO	TA	Chi-Square, %, C
32	49	SRO	AGE	Chi-Square, %, C
33	50	SRO	GEND.	Chi-Square, %, C
34	51	SRO	EDU.	Chi-Square, %, C
35	52	SRO	YEARS	Chi-Square, %, C
36	53	SRO	PV	Chi-Square, %, C
37	54	SRO	LOC	Chi-Square, %, C

OUTPUT NO.	HYPOTHESIS NO.	INDEPENDENT VARIABLES	DEPENDENT VARIABLES	STATISTICAL TOOLS USED
ANDROGYNY ANALYSIS				
38	55	AND	AGE	Chi-Square, %, C
39	56	AND	GEND.	Chi-Square, %, C
40	57	AND	EDU.	Chi-Square, %, C
41	58	AND	TP	Chi-Square, %, C
42	59	AND	TR	Chi-Square, %, C
43	60	AND	TA	Chi-Square, %, C
44	61	AND	YEARS	Chi-Square, %, C
45	62	AND	MH	Chi-Square, %, C, Eta C.
46	63	AND	EC	Chi-Square, %, C, Eta C
47	64	AND	SEA	Chi-Square, %, C, Eta C
48	65	AND	LOC	Chi-Square, %, C
	66	AND	Int.LOC	Eta Correlation
49	67	AND	PV	Chi-Square, %, C
50	68	AND	PSE	Eta Correlation
51	69	AND	PR	Eta Correlation
52	70	AND	IP	Eta Correlation
53	71	AND	AUT	Eta Correlation
54	72	AND	GOA	Eta Correlation
55	73	AND	EM	Eta Correlation

OUTPUT NO.	HYPOTHESIS NO.	INDEPENDENT VARIABLES	DEPENDENT VARIABLES	STATISTICAL TOOLS USED
56	74	AND	ADF	Eta Correlation
57	75	AND	AECE	Eta Correlation
58	76	AND	AFE	Eta Correlation
59	77	AND	ACPE	Eta Correlation
60	78	AND	EPE	Eta Correlation
VALUE ANALYSIS:				
61	79	PV	TP	Chi-Square, %, C
62	80	PV	TR	Chi-Square, %, C
63	81	PV	TA	Chi-Square, %, C
64	82	PV	AGE	Chi-Square, %, C
65	83	PV	GEND.	Chi-Square, %, C
66	84	PV	EDU.	Chi-Square, %, C
67	85	PV	YEARS	Chi-Square, %, C
68	86	PV	MH	Chi-Square, %, C, Eta C
69	87	PV	SEA	Chi-Square, %, C, Eta C
70	88	PV	EC	Chi-Square, %, C, Eta C
71	89	PV	LOC	Chi-Square, %, C

CORRELATIONALANALYSIS: PARTIAL C

OUTPUT NO.	HYPOTHESIS NO.	VARIABLE- 1	VARIABLE-2	CONTROLLED VARIABLES
72	91	MH	SEA	EC,LOC,Int.LOC,PV,AND
73	92	MH	EC	SEA,LOC,Int.LOC,PV,AND
73	93	MH	LOC	SEA,EC,PV,AND
75	94	MH	Int.LOC	SEA,EC,PV,AND
76	95	SEA	EC	MH,LOC,Int.LOC,PV,AND
77	96	SEA	LOC	MH,EC,PV,AND
78	97	SEA	Int.LOC	MH,EC,PV,AND
79	98	EC	LOC	MH,SEA,PV,AND
80	99	EC	Int.LOC	MH,SEA,PV,AND
81	Reliability-1		Masculinity	BSRI (Hindi)
	Reliability-1		Feminity	BSRI (Hindi)
	Reliability-1		Total	BSRI (Hindi)
82	Reliability-2		SEAI	SEAI (English)
83	Reliability-3		LOC	LOC Scale (English)

CHAPTER - 4

RESULTS & DISCUSSIONS

Results and Discussions:

The results obtained through the statistical analysis of the observed data through SPSS 13.0 version are discussed here, at the .05 level of significance, under following FOUR main titles:

1. ANOVA Analysis
2. Sex-Role Orientation Analysis
3. Androgyny Analysis
4. Concomitant Correlational Analysis:
    - Part-1. Value Analysis
    - Part-2. Other Variables.

1. ANOVA Analysis:

Among all the results, first 28 outputs constituted ANOVA analysis. These ANOVA results included four Dependent variables; namely, Mental Health (MH), Emotional Competence (EC), Self-actualization (SEA) and Internality of Locus of Control (Int. Loc). ANOVA, on the scores of these four variables, under lied eight Independent variables, which were Sex-Role Orientation (SRO), Type of Person (TP), Education, Type of Religion (TR), Type of art (TA), Years of Experience, Age and Gender. Respective Hypotheses about the effects of various Independent variables on the four Dependent variables, are discussed under following four sub-titles:

(1) Mental Health Analysis:
(2) Emotional Competence Analysis
(3) Self-actualization Analysis
(4) LOC & Internality of LOC Analysis

It is important here to clarify one point about discussing the results in terms of cause and effects in the ex post facto or the quasi-experimental design as used here. As Kerlinger says in his book on ‘ Foundations of Bahavioural Research”,

“ … the study of cause and causation is an endless maze. One of the difficulties is that the word “cause” has surplus meaning and metaphysical overtones. Perhaps more important, it is not really needed. Scientific research can be done without invoking cause and causal explanations, even though the words and other words that imply cause are almost impossible to avoid and thus occasionally will be used. Blalock points out that causal laws cannot be demonstrated empirically, but that it is helpful to think causally. There is little doubt that scientists do think causally when they talk of a relation between *p* and *q* they *hope* or *believe* that *p* causes *q*. But no amount of evidence can demonstrate that *p does* cause *q*.

…Invocation of the word “cause” and the expression “causal relation” does nothing really constructive. Indeed, it can be misleading… In sum, the elements of deductive logic in relation to conditional statements (*if p then q kind*), a probabilistic framework and method of work and inference, and the testing of alternative hypotheses are sufficient aids to scientific ex post facto work without the excess baggage of causal notions and methods presumably geared to strengthening casual inferences. We rest the case with some apt words of Bertrand Russell:

“…. The word “cause” is so inextricably bound up with misleading associations as to make its complete extrusion from

the philosophical vocabulary desirable… the reason physics has ceased to look for causes is that, in fact, there are no such things. The law of causality… is relic of a bygone age, surviving, like monarchy, only because it is erroneously supposed to do no harm." (B. Russell "On the Notion of Cause, with Application in the Free-Will Problem" quoted from Kerlinger F.N. 1973:393)

Thus, the whole scientific methodology of deriving conclusions and making generalizations about the causal relationships between two variables, itself is being questioned for its logical vigor. The scientific methodology, as argued by Sir Karl Popper, is ultimately based on inductive logic. The 'Inductive Jump' made from a number of observations to the whole population itself is not at all causally certain. 'Inductive Jump' itself carries with it the uncertainty, as originally suggested by Hume and implied by his famous and still unanswered argument against Inductive Generalizations that *"Past has no guarantee for the future"*. Therefore, Karl Popper argued to base scientific methodology on deductive logic, (rather than on induction) giving logical assurance for the causal statements derived through 'Falsification' rather than through verification.

Secondly, the scientific methodology itself has been questioned not only from the logical argument of Popper but Thomas Kuhn also showed how the Sociology of Knowledge plays its role in establishment of scientific paradigms, Lakatos argued for the cultural relativism of even scientific language and finally Feyeraband goes up to the extent to propound "Anarchy of Knowledge" seeing no possibility of getting truth from any method.

Thirdly, 20th century physics with its quantum theory and relativity theory, use the language of probability rather than that of causal and deterministic certainty as implied by Heisenberg's Uncertainty Principle. Thus when the most basic natural science like physics, lying at the base of the whole reductionist model of sciences, itself has become humble about its claim of causal certainty, then in social science research and that also research with ex post facto designs, as used in present research, lacking control for the manipulation of independent variables and also lacking randomization for assignments of subjects to different treatment groups, the claims of causality have to be very, very humble. This being so, though researcher has used the language like -" Androgyny positively affects Mental Health" or "Androgyny facilitates Mental Health" or 'Sex-role Orientation has positive effect on Mental Heath" or on Emotional Competence or on Self-Actualization etc. -it is just because we are used to express or interpret the ANOVA results in this language and also because as Kerlinger pointed out, use of the 'words and other words that imply cause are almost impossible to avoid'.

It is important to clarify here that ultimately all these statements imply only probabilistic associations rather than causal relations in strict sense of the term, which has now become 'a relic of bygone age' as Bertrand Russell pointed out in above quotation. With this humble clarification, we now proceed to the discussions of results.

1. Mental Health Analysis:

All the Hypotheses about the effects of various Independent variables on Mental Health are discussed as under:

Univariate Analysis of Variance: OUTPUT-1. HYPOTHESES: 1-3

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	undifferenciated	72
	1	Androgynous	157
	2	Masculine	52
	3	Feminine	112
Type of Person	0	Normals	124
	1	Saints	106
	2	Artists	163
Education	0	Under graduate	61
	1	Graduate	149
	2	Double & Post Graduate	114
	3	More than PG	69

Tests of Between-Subjects Effects

Dependent Variable: Mental Health

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	36889.475(a)	47	784.882	2.076	.000
Intercept	5886013.784	1	5886013.784	15565.815	.000
Sro	6485.789	3	2161.930	5.717	.001
Person	3655.247	2	1827.623	4.833	.009
educat	3649.996	3	1216.665	3.218	.023
sro * person	2500.537	6	416.756	1.102	.361
sro * educat	7978.577	9	886.509	2.344	.014
Person * educat	3179.542	6	529.924	1.401	.213
sro * person * educat	5287.120	18	293.729	.777	.728
Error	130457.334	345	378.137		
Total	11904545.000	393			
Corrected Total	167346.809	392			

a R Squared = .220 (Adjusted R Squared = .114)

Estimated Marginal Means

Sex-role Orientation

Dependent Variable: Mental Health

Sex-role Orientation	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
undifferenciated	162.334	3.511	155.429	169.239
Androgynous	177.905	1.892	174.183	181.626
Masculine	172.970	3.079	166.914	179.025
Feminine	170.632	2.158	166.387	174.877

Type of Person

Dependent Variable: Mental Health

Type of Person	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Normals	170.107	2.401	165.385	174.828
Saints	166.411	2.643	161.213	171.609
Artists	176.362	2.038	172.355	180.370

Education

Dependent Variable: Mental Health

Education	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Under graduate	169.218	3.427	162.478	175.958
Graduate	165.996	1.919	162.221	169.771
Double & Post Graduate	172.299	2.266	167.843	176.756
More than PG	176.327	3.079	170.270	182.383

Sex-role Orientation * Education

Dependent Variable: Mental Health

Sex-role Orientation	Education	Mean	Std. Error
Undifferenciated	Under graduate	144.250	9.723
	Graduate	157.977	3.394
	Double & Post Graduate	172.176	4.891
	More than PG	174.933	8.199
Androgynous	Under graduate	184.143	4.900
	Graduate	172.157	3.039
	Double & Post Graduate	179.511	2.794
	More than PG	175.807	4.029
Masculine	Under graduate	181.857	6.929
	Graduate	161.622	5.021
	Double & Post Graduate	172.056	5.917
	More than PG	176.344	6.589
Feminine	Under graduate	166.621	4.618
	Graduate	172.229	3.602
	Double & Post Graduate	165.456	3.925
	More than PG	178.222	4.983

Post Hoc Tests

Sex-role Orientation

Multiple Comparisons

Dependent Variable: Mental Health
LSD

(I) Sex-role Orientation	(J) Sex-role Orientation	Mean Difference (I-J)	Std. Error	Sig.
undifferenciated	Androgynous	-13.19(*)	2.768	.000
	Masculine	-9.01(*)	3.539	.011
	Feminine	-5.67	2.937	.054
Androgynous	undifferenciated	13.19(*)	2.768	.000
	Masculine	4.18	3.111	.180
	Feminine	7.52(*)	2.405	.002
Masculine	undifferenciated	9.01(*)	3.539	.011
	Androgynous	-4.18	3.111	.180
	Feminine	3.34	3.263	.307
Feminine	undifferenciated	5.67	2.937	.054
	Androgynous	-7.52(*)	2.405	.002
	Masculine	-3.34	3.263	.307

Based on observed means.

* The mean difference is significant at the .05 level.

Type of Person

Multiple Comparisons

Dependent Variable: Mental Health
LSD

(I) Type of Person	(J) Type of Person	Mean Difference (I-J)	Std. Error	Sig.
Normals	Saints	3.02	2.572	.242
	Artists	-3.12	2.317	.180
Saints	Normals	-3.02	2.572	.242
	Artists	-6.13(*)	2.426	.012
Artists	Normals	3.12	2.317	.180
	Saints	6.13(*)	2.426	.012

Based on observed means.

* The mean difference is significant at the .05 level.

Education

Multiple Comparisons

Dependent Variable: Mental Health
LSD

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.
Under graduate	Graduate	6.99(*)	2.956	.019
	Double & Post Graduate	1.00	3.085	.746
	More than PG	-.75	3.417	.826
Graduate	Under graduate	-6.99(*)	2.956	.019
	Double & Post Graduate	-5.99(*)	2.420	.014
	More than PG	-7.74(*)	2.832	.007
Double & Post Graduate	Under graduate	-1.00	3.085	.746
	Graduate	5.99(*)	2.420	.014
	More than PG	-1.75	2.966	.555
More than PG	Under graduate	.75	3.417	.826
	Graduate	7.74(*)	2.832	.007
	Double & Post Graduate	1.75	2.966	.555

Based on observed means.

* The mean difference is significant at the .05 level.

Univariate Analysis of Variance :
OUTPUT : 1 HYPOTHESSIS: 3 (Extra)

Between-Subjects Factors

		Value Label	N
Education	0	Under graduate	62
	1	Graduate	149
	2	Double & Post Graduate	115
	3	More than PG	69
Type of Person	0	Normals	124
	1	Saints	106
	2	Artists	165

Tests of Between-Subjects Effects

Dependent Variable: Mental Health

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	13940.222(a)	11	1267.293	3.145	.000
Intercept	9331788.727	1	9331788.727	23161.843	.000
Educat	4673.190	3	1557.730	3.866	.010
Person	3556.608	2	1778.304	4.414	.013
educat * person	6521.777	6	1086.963	2.698	.014
Error	154308.750	383	402.895		
Total	11967379.000	395			
Corrected Total	168248.972	394			

a R Squared = .083 (Adjusted R Squared = .057)

Estimated Marginal Means

Education * Type of Person

Dependent Variable: Mental Health

Education	Type of Person	Mean	Std. Error
Under graduate	Normals	166.167	5.794
	Saints	182.800	4.488
	Artists	173.933	3.665
Graduate	Normals	168.703	3.300
	Saints	162.225	3.174
	Artists	172.167	2.366
Double & Post Graduate	Normals	173.667	3.214
	Saints	172.448	3.727
	Artists	177.234	2.928
More than PG	Normals	176.694	3.345
	Saints	164.824	4.868
	Artists	187.938	5.018

Hypothesis-1:

The null hypothesis that there are no significant differences in the Mental Health of the subjects with different Sex-Role Orientation is rejected by the empirical findings of present research. (Output.1, Hypothesis: 1). This means that Sex-Role Orientation has significant association with Mental Health. The highest mean scores for MH is found with the Androgynous SRO (177.905), then with the Masculine (172.970), Feminine (170.632), and the Undifferentiated (162.332) respectively.

Thus, Androgyny is found to facilitate Mental Health. As the LSD results suggest, the Mental Health of the Androgynous

subjects was significantly higher than the Feminine and the Undifferentiated. However, the difference between the Androgynous and the Masculine subjects with respect to Mental Health was not statistically significant, which suggests that androgyny and/or masculinity facilitate Mental Health. This finding is quite consistent with a number of previous studies cited in "Review of Literature. As review of literature had suggested, a number studies have supported the Hypothesis that Androgyny and/or Masculinity are significantly associated with higher Mental Health, which has been reinforced by present research too.

However, considering the highest MH scores of the Androgynous subjects, we can say that Androgyny *tends* to facilitate MH more than masculinity. The correlational analysis of present research also shows significant positive correlation between Androgyny and Mental Health. Not only eta correlation between androgyny and Mental Health, but all the partial correlations between Androgyny and Mental while controlling statistically the effects of other variables like Sea, EC, LOC, Int. LOC, and PV, are also statistically significant. (Output. 45, Hypothesis: 62)

The very concept of Androgyny implies the integration of two major polarities of masculinity and feminity within one's own self, and integration of personality constitutes an important part of Mental Health. The Mental Health Inventory used in present research also measured integration of personality as one of the six components of Mental Health. This being so, it was quite logical to hypothesize that Androgyny must be positive correlated with Mental Health or Androgyny and the empirical findings of present research supported this hypothesis. This might be the reason why

Pyke S. W. (1985) had given the title of his/her paper as " Androgyny: An Integration."

Univariate Analysis of Variance: OUTPUT: 2 HYPOTHESIS: 4

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	undifferenciated	23
	1	Androgynous	33
	2	Masculine	11
	3	Feminine	39
Type of Religion	1	Hinduism	31
	2	Christianity	57
	3	Jainism	18
Education	0	Under graduate	20
	1	Graduate	40
	2	Double & Post Graduate	29
	3	More than PG	17

Tests of Between-Subjects Effects

Dependent Variable: Mental Health

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	21797.168	32	681.161	3.488	.000
Intercept	1138980.010	1	1138980.010	5831.531	.000
sro	810.880	3	270.293	1.384	.255
religiontype	3591.463	2	1795.732	9.194	.000
educat	1214.856	3	404.952	2.073	.111
sro * religiontype	3146.990	6	524.498	2.685	.021
sro * educat	1791.461	8	223.933	1.147	.343
religiontype * educat	1500.873	5	300.175	1.537	.189
sro * religiontype * educat	66.056	4	16.514	.085	.987
Error	14257.926	73	195.314		
Total	3075024.000	106			
Corrected Total	36055.094	105			

Estimated Marginal Means

Type of Religion

Dependent Variable: Mental Health

Type of Religion	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Hinduism	179.276	2.960	173.376	185.176
Christianity	156.958	2.425	152.125	161.791
Jainism	177.898	4.394	169.142	186.654

Sex-role Orientation * Type of Religion

Dependent Variable: Mental Health

Sex-role Orientation	Type of Religion	Mean	Std. Error
undifferenciated	Hinduism	166.500(a)	6.052
	Christianity	153.944	5.311
	Jainism	185.000(a)	13.975
Androgynous	Hinduism	184.104	3.906
	Christianity	155.944(a)	4.123
	Jainism	179.333(a)	6.074
Masculine	Hinduism	169.750	6.988
	Christianity	156.500(a)	5.705
	Jainism	178.000(a)	13.975
Feminine	Hinduism	194.056(a)	5.862
	Christianity	162.449(a)	3.273
	Jainism	172.143(a)	7.470

a Based on modified population marginal mean.

Post Hoc Tests

Type of Religion

Multiple Comparisons

Dependent Variable: Mental Health
LSD

(I) Type of Religion	(J) Type of Religion	Mean Difference (I-J)	Std. Error	Sig.
Hinduism	Christianity	22.99(*)	3.119	.000
	Jainism	2.83	4.141	.497
Christianity	Hinduism	-22.99(*)	3.119	.000
	Jainism	-20.16(*)	3.779	.000
Jainism	Hinduism	-2.83	4.141	.497
	Christianity	20.16(*)	3.779	.000

Based on observed means.

* The mean difference is significant at the .05 level.

Hypothesis –2:

The null hypothesis that there are no significant differences in the Mental Health of saints, artists, and normals is rejected here (Output. 1, Hypothesis; 2). Thus, type of person had significant effect on Mental Health. Saints, artists, and normals differed significantly on their Mental Health scores. As the mean scores suggest, artists were found to have highest scores of Mental Health (176.362) than the normals (170.107) and saints (166.411) respectively. Saints showed lowest scores on Mental Health as compared to artists and normals. The mean difference between saints and artists was significant, while the difference between normals and saints and between the artists and normals were non-significant.

One of the reason for the lowest Mental Health score of saints might be due to the fact that saints- be of any religion – belong to that spiritual tradition where the standards of self-perfection are normally very high, as compared to normal. The very concept of spirituality means concentrating on self-transformation. This implied that saints in general, might be more self-critical, their standards of evaluating themselves might be stricter than the non-saints. For example, as one of the item on Mental Health scale, says, “I feel irritation.” The normal non-analytical person would hastily reply- “Never”, while saints, trained in subtle analysis, would say “sometimes.” Thus, on many negative items, saints might have underscored themselves due to their perfectionist attitude and training. Similarly, on positive items also saints may give them less scoring due to their humility about their own selves.

There are few empirical studies available on the psychology of saints. Approximately 450 studies reviewed here, only one study was found on clergy. This being so, only qualitative and secondary data of spontaneous cases, reported in literature have be used for explaining the results. As a real story of a spiritual master says: “There were two disciples, sitting leisurely before their master. One was normal householder and the other was a very good saint, reputed for his spiritual perfection. Both were disciples of the master. The master asked both the disciples, “How many thoughts disturb you when you people are meditating? “The householder said, “nil” that is, “I have no thought disturbance when I sit for meditation”; while that great saint – disciple raised an arm,

full of dust and said, “I get as many thoughts as the particles of this dust contain, when I sit for meditation.”

This real story of spiritual tradition indicates that spiritual training teaches the saints to catch their subtlest – mental processes, which the normals usually cannot catch or watch. Such subtle training of being self-critical is common to all spiritual traditions, irrespective of the Type of Religion they follow. So this habit of being over self-critical, might have led saints to under-evaluate themselves, yielding the lowest scores on Mental Health.

If this explanation is correct, then it can be hypothesize that saints would have significantly lower scoring on PSE component of MH. The Mental Health inventory, which was used here, constituted six components of Mental Health, namely, positive self – evaluation (PSE), perception of reality (PR), Integration of Personality (IP), Autonomy (AUT), Group Oriented Attitude (GOA) and Environmental Mastery (EM). Thus, one of the components of Mental Health measured here was positive self-evaluation. And as discussed above, saints must have scored significantly lower on PSE, if the above stated interpretation of saints’ perfectionist ideal about evaluating themselves was right. So further components-wise analysis of the Mental Health of saints, artists, and normals was made and it clearly substantiates this hypothesis. (Output. 1, component wise Mental Health)

As the result shows, out of the six components of Mental Health (PSE, PR, IP, AUT, GOA, EM); saints, artists, and normals differ significantly only on PSE i.e. on Positive Self-evaluation and Autonomy. Result shows that saints have significantly scored low

on PSE, which has contributed on overall lowest scoring of Mental Health of saints. Because, on all the other five components, saints have either scored higher or if low, their difference with the normals is almost negligible and non-significant. Type of person also has significant effect on autonomy, but LSD suggests that in Autonomy, saints have scored significantly higher than normals. Thus, detailed component wise analysis of Mental Health with reference to type of person, clearly suggests that saints' low scoring on Positive Self-Evaluation has contributed significantly in saints' low scoring on MH, which is due to their underestimation about themselves underlying perfectionist ideal of self-transformation as taught in spiritual tradition.

It is important to note here that under-evaluation of one's own merits based on perfectionist ideal is different from low self-esteem, which indicates negative personality syndrome. Low self-esteem and perfectionist ideal – both are reflected as low scoring on PSE, however, low self – esteem underlies negative, pessimistic and depressive tendency leading to pathology, while under – evaluation of one's own self, due to perfectionist ideal underlies optimism and growth motivation leading to Self-actualization, if we use Maslow's terminology of humanistic psychology.

In spiritual tradition, this fact of under – evaluating one's own self, built on growth motivation, has been termed as "Divine Discontent", which has been considered to be higher than the normal contentment. Socrates' famous dictum depicts this 'Divine Discontent' in following words. "It is better to be man-dissatisfied

than pig-satisfied, and it is still better to be Socrates-dissatisfied than ordinary man-satisfied." In short, the "Divine Discontent" of saints about themselves might have led them to lower Mental Health scoring than even normals.

On the basis of above-stated analysis about the lower scoring on Mental Health Inventory by saints, it can be said that this indicates a need to have separate norms for the Mental Health measurement of saints. Because all our psychological measurements are standardized usually upon normal population, and usually we do not have separate norms or separate psychological tests for the population, which is thought to be 'ab-normal' – away from the normal. For the below–normal population, or for psychopathology, there are still available some psychological tests like projective techniques or TAT for diagnosis of mental disorders. But especially for the above-normal populations with growth motivation, a little amount of tests or even norms is available. This being so, accessing saints' personality through normal measurement, itself constitutes a major limitation. When we aim to measure and analyze saints' psychology, we need to have either a separate measurement tool or separate norms or some statistical criterion to adjust the normal scoring with the above – normal scoring.

In short, saints' lowest Mental Health scoring has been attributed to their humble and under-evaluation about themselves due to their perfectionist ideal. This hypothetical attribution was empirically substantiated through saints' significant lowest scoring on Positive Self – Evaluation (PSE), which constituted one of the

six components of Mental Health, measured here through the inventory used here. Again this lowest scoring on PSE was interpreted here, not as low self-esteem suggesting ill Mental Health, but it was interpreted, *logically not empirically*, as the 'Divine Discontent' of saints, underlying the growth motivation of Self-actualization.

Although explaining saints' lowest Mental Health scoring on the basis of these arguments stemming from qualitative evidence and partially on the basis of empirical evidence of PSE, still all these arguments and discussions can be challenged further through Karl Popper's criterion of "Falsification." One may argue that justifying lower scoring of saints on PSE through their 'Divine Discontent' means we are using 'Unfalsifiable' criterion of evaluating saints' Mental Health. If they score high on Mental Health Inventory, we say that saints have higher Mental Health, and if they score low on Mental Health, we are reluctant to say that saints have poor Mental Health because of our conditioning that saints are above-normal people and the spiritual and religious traditions, which they practice, are for personality growth only.

There seems to be no answer to Popper's 'falsification' argument. Maintaining total scientific temper, we can conclude that saints' lowest scoring on PSE and hence on Mental Health suggests either low self-esteem and hence poor MH of saints or it suggests their perfectionist standard of self – evaluation underlying the 'Growth Motivation' of 'Divine Discontent. Which of these two possibilities or interpretations is factual can be answered only through further empirical investigations and subtle mental

measurements where negative self – evaluations of low self – esteem and 'Divine Discontent' are distinguished empirically.

Finally, artists were found to have the highest Mental Health scores, as compared to normals and saints. The reason may be that training and discipline of art, unfolds human potentials and leads to the above – normal level of self – actualization which has been confirmed empirically through their highest scoring on self – actualization too. (Output. 15, Hypothesis: 20) Secondly, worship of art is not directly related to strict self – analysis and improvement of human nature. This being so, artists have not underscored themselves on PSE or any other criterion of Mental Health, underlying any intervening hypothetical mental process of divine discontent as saints might have. These might be the reasons for highest Mental Health scoring of artists.

Highest MH scoring of Artists observed in present research is quite consistent with that of Manheim (1998) who found that art and creativity were correlated with Self- actualization and implied higher life satisfaction. In short, art has been found to facilitate Mental Health significantly.

Hypothesis - 3:

The null hypothesis that there are no significant differences in the Mental Health of subject with different educational level is rejected here through the findings of present research. (Output. 1, Hypothesis: 3). This means that education significantly affects the Mental Health of the person. As the LSD results suggest, undergraduates (UG) scored (169.218) significantly higher on MH

than the graduates (165.996). Similarly double and post – graduates (172.299) and the subjects with education more than PG (176.327) – both have scored significantly higher on MH than graduates. The difference in the Mental Health of under – graduates and double post – graduates and of UG and more than PG was statistically non – significant.

In short, graduates had significantly lower Mental Health scoring than the UG, double/post graduates and Ss with education more than PG. Graduates' under scoring on MH than the double/post graduates and the Ss with more than PG education, suggests the gradually increasing effect of education on Mental Health especially after graduation. Before graduation, the effect of education on Mental Health is not clearly positive. Rather, the striking result is that graduates have scored significantly lower on Mental Health than even the undergraduates.

The reason for this unusual result might be that especially in present research, the total sample does not include normals only. Saints and artists are also included in the sample. It is quite possible that saints and artists may have less formal education, i.e. they may be undergraduates, but in their field of spirituality or art, they might have higher development due to which they might have higher Mental Health than the graduate normals. The results support this Hypothesis. (Output. 1, Hypothesis: 3 (extra)).

Type of person, in interaction with education, produces significant effect on Mental Health. As the mean – comparisons of this interaction show, normal graduates have significantly low Mental Health scores (168. 703) than the undergraduate saints

(182. 800) and undergraduate artists (173. 933). Even within the saints and artists also, undergraduate saints (182.800) & artists (173.933) have scored significantly higher on Mental Health than graduate saints (162.222) and graduate artists (172.167). This implies that though saints and artists might not have taken formal education up to graduation, and so they might be termed 'Undergraduate' in modern terms, but they might have educated themselves deeply through informal education of their scriptures or of art, which might have compensated for their formal education loss, and therefore, they might have scored higher on Mental Health.

Thus, education in case of undergraduate saints and artists might be producing its positive effect on Mental Health through informal education, and after graduation PG and more than PG have obviously shown significantly higher Mental Health scores. It is the consistently significant after – graduation effect of education on Mental Health, which justifies logically to attribute the undergraduates' higher Mental Health scoring to the other type of informal education of higher quality only and not to loss of or less education. While collecting data of saints and artists, researcher had encountered a number of Hindu saints who had by-hearted the whole 'Ramcharit Manas' or The Gita, they were giving discourses to the large group of seekers, and formally they had education less than graduation. The same had happened in case of Jain saints and in case of eminent artists too. Thus, field-survey of the researcher also substantiates indirectly the hypothesis that

UG's higher scoring on MH must be due to informal education of higher quality and not to less or loss of education.

Thus, education in general is found to facilitate Mental Health. This conclusion is consistent with the Coleman's contention that education enhances democratic attitude, openness, reduces dogmatism, ethnocentrism and orthodoxy. Thus, according to Coleman, many positive personality changes take place due to education. Present study adds one more positive change of better Mental Health due to education.

It is important to note here that artists with education more than PG had maximum Mental Health score (187.938) among all the groups of Ss in various categories of education & types of person (Output. 1 Hypothesis: 3(extra), Edu x TP). This means that education combined with art yields maximum Mental Health.

Another important aspect of the results is that education had significant effect on MH, in interaction with not only the type of person, but also with SRO. As the LSD results of the interaction between Sex-Role Orientation and Education show, the Androgynous persons in UG, graduate and PG level of education, had significant higher Mental Health scores than the Feminine, Masculine and the Undifferentiated Ss of these three educational levels. It is important to note that Androgynous undergraduates (Output. 1 Hypothesis: 3, SRO x Education) had significantly higher Mental Health scores (184.143) than the normal subjects with the highest education of more than PG (176.694) or even PG

(173.667) (Output. 1, Hypothesis: 3 (Extra), Education x Type of Person).

Thus, Androgynous Sex-Role Orientation compensates the effect of less education on Mental Health. Similarly, among all the Undifferentiated SRO – persons, Mental Health scores gradually increases with education from UG (144.250), Graduate(157.977), Double and Post Graduates (172.176) to Ss with more than PG (174.933). Thus, lacking in Androgyny or SRO is compensated by education and lacking in Education, is compensated by Androgynous SRO in facilitating Mental Health. The Undifferentiated undergraduates had minimum Mental Health scores (144.250) among all the interacting groups of SRO and Education. (Output. 1, Hypothesis: 3, SRO x Edu.).

Thus, Androgyny and Education, both are complementary in facilitating Mental Health. However, the Undifferentiated subject, with the highest, more than PG education (174.933) and the Androgynous subject with more than PG education (175.807) both had almost same mean score (175.0). This means that even between the two facilitating factors like Androgyny and education, education is more effective than Androgyny in facilitating Mental Health.

Univariate Analysis of Variance: Output: 2 Hypothesis: 4

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	undifferenciated	23
	1	Androgynous	33
	2	Masculine	11
	3	Feminine	39
Type of Religion	1	Hinduism	31
	2	Christianity	57
	3	Jainism	18
Education	0	Under graduate	20
	1	Graduate	40
	2	Double & Post Graduate	29
	3	More than PG	17

Tests of Between-Subjects Effects

Dependent Variable: Mental Health

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	21797.168	32	681.161	3.488	.000
Intercept	1138980.010	1	1138980.010	5831.531	.000
sro	810.880	3	270.293	1.384	.255
religiontype	3591.463	2	1795.732	9.194	.000
educat	1214.856	3	404.952	2.073	.111
sro * religiontype	3146.990	6	524.498	2.685	.021
sro * educat	1791.461	8	223.933	1.147	.343
religiontype * educat	1500.873	5	300.175	1.537	.189
sro * religiontype * educat	66.056	4	16.514	.085	.987
Error	14257.926	73	195.314		
Total	3075024.000	106			
Corrected Total	36055.094	105			

Estimated Marginal Means

Type of Religion

Dependent Variable: Mental Health

Type of Religion	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Hinduism	179.276	2.960	173.376	185.176
Christianity	156.958	2.425	152.125	161.791
Jainism	177.898	4.394	169.142	186.654

Sex-role Orientation * Type of Religion

Dependent Variable: Mental Health

Sex-role Orientation	Type of Religion	Mean	Std. Error
undifferenciated	Hinduism	166.500	6.052
	Christianity	153.944	5.311
	Jainism	185.000	13.975
Androgynous	Hinduism	184.104	3.906
	Christianity	155.944	4.123
	Jainism	179.333	6.074
Masculine	Hinduism	169.750	6.988
	Christianity	156.500	5.705
	Jainism	178.000	13.975
Feminine	Hinduism	194.056	5.862
	Christianity	162.449	3.273
	Jainism	172.143	7.470

Post Hoc Tests

Type of Religion

Multiple Comparisons

Dependent Variable: Mental Health
LSD

(I) Type of Religion	(J) Type of Religion	Mean Difference (I-J)	Std. Error	Sig.
Hinduism	Christianity	22.99(*)	3.119	.000
	Jainism	2.83	4.141	.497
Christianity	Hinduism	-22.99(*)	3.119	.000
	Jainism	-20.16(*)	3.779	.000
Jainism	Hinduism	-2.83	4.141	.497
	Christianity	20.16(*)	3.779	.000

Based on observed means.

* The mean difference is significant at the .05 level.

Crosstabs : Output : 30 Hypothsis : 47 . (Output :2 Hypothesis :4 (Extra))

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex-role Orientation * Type of Religion	366	48.7%	386	51.3%	752	100.0%

Sex-role Orientation * Type of Religion Crosstabulation

			TYPE OF RELIGION				
			Buddhism	**Hinduism**	**Christianity**	**Jainism**	**TOTAL**
Sex-role Orientation	undifferenciated	Count	14	21	17	6	58
		% within Sex-role Orientation	24.1%	36.2%	29.3%	10.3%	100.0%
		% within Type of Religion	11.7%	17.1%	29.3%	9.2%	15.8%
		% of Total	3.8%	5.7%	4.6%	1.6%	15.8%
	Androgynous	Count	38	49	12	29	128
		% within Sex-role Orientation	29.7%	38.3%	9.4%	22.7%	100.0%
		% within Type of Religion	31.7%	39.8%	20.7%	44.6%	35.0%
		% of Total	10.4%	13.4%	3.3%	7.9%	35.0%
	Masculine	Count	17	15	6	7	45
		% within Sex-role Orientation	37.8%	33.3%	13.3%	15.6%	100.0%
		% within Type of Religion	14.2%	12.2%	10.3%	10.8%	12.3%
		% of Total	4.6%	4.1%	1.6%	1.9%	12.3%
	Feminine	Count	51	38	23	23	135
		% within Sex-role Orientation	37.8%	28.1%	17.0%	17.0%	100.0%
		% within Type of Religion	42.5%	30.9%	39.7%	35.4%	36.9%
		% of Total	13.9%	10.4%	6.3%	6.3%	36.9%
Total		**Count**	**120**	**123**	**58**	**65**	**366**
		% within Sex-role Orientation	**32.8%**	**33.6%**	**15.8%**	**17.8%**	**100.0%**
		% within Type of Religion	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
		% of Total	**32.8%**	**33.6%**	**15.8%**	**17.8%**	**100.0%**

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.217(a)	9	.023
Continuity Correction			
Likelihood Ratio	18.768	9	.027
Linear-by-Linear Association	1.046	1	.306
N of Valid Cases	366		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.13.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.223	.023
N of Valid Cases		366	

Crosstabs: Output: 2 Hypothesis: 4 (Extra)

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Type of Religion * Education	268	35.6%	484	64.4%	752	100.0%

Type of Religion * Education

			Education				
			Under Graduate	**Graduate**	**Double & PG**	**More than PG**	**TOTAL**
Type of Religion	Buddhism	Count	5	28	30	3	66
		% within Type of Religion	7.6%	42.4%	45.5%	4.5%	100.0%
		% within Education	8.8%	28.3%	38.5%	8.8%	24.6%
		% of Total	1.9%	10.4%	11.2%	1.1%	24.6%
	Hinduism	Count	20	37	27	18	102
		% within Type of Religion	19.6%	36.3%	26.5%	17.6%	100.0%
		% within Education	35.1%	37.4%	34.6%	52.9%	38.1%
		% of Total	7.5%	13.8%	10.1%	6.7%	38.1%
	Christianity	Count	1	29	15	12	57
		% within Type of Religion	1.8%	50.9%	26.3%	21.1%	100.0%
		% within Education	1.8%	29.3%	19.2%	35.3%	21.3%
		% of Total	.4%	10.8%	5.6%	4.5%	21.3%
	Jainism	Count	31	5	6	1	43
		% within Type of Religion	72.1%	11.6%	14.0%	2.3%	100.0%
		% within Education	54.4%	5.1%	7.7%	2.9%	16.0%
		% of Total	11.6%	1.9%	2.2%	.4%	16.0%
Total		**Count**	**57**	**99**	**78**	**34**	**268**
		% within Type of Religion	**21.3%**	**36.9%**	**29.1%**	**12.7%**	**100.0%**
		% within Education	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	21.3%	36.9%	29.1%	12.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	101.444(a)	9	.000
Continuity Correction			
Likelihood Ratio	94.801	9	.000
Linear-by-Linear Association	16.897	1	.000
N of Valid Cases	268		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.46.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.524	.000
N of Valid Cases		268	

Hypothesis - 4:

The null hypothesis that there are no significant differences in the Mental Health of saints with different religions is rejected (Output. 2, Hypothesis: 4) through the findings of present research. This means that the saints of different religions differ significantly in their Mental Health. Thus, Type of Religion followed by saints has significant effect on the Mental Health of saints.

As the 'Type of Person' analysis (Output. 1, Hypothesis: 2) had suggested, saints had significantly low Mental Health scores than the artists; saints had scored lower than even normal on Mental Health, though this difference was not statistically significant. Thus, over-all saints had minimum Mental Health scores. Though this minimum Mental Health scoring of saints (166.411) compared to normals (170.107) and artists (176.107), belong to 'Average' category, as per the norms given by Mental Health Inventory used here. As per the norms of Mental Health used here, the scoring from 154.26 to 175.14 belong to Average Mental Health and scoring front 175.14 – 196.02 belong to 'Good' Mental Health. Thus, only artists' significantly higher scoring on Mental Health (176.362) implied 'Good' Mental Health, while saints, though had minimum scoring, it was not significantly lower than normals, as the scoring of both – saints & normals was Average only as per the norms of Mental Health Inventory.

Further analysis of this 'Average' Mental Health of saints suggests, that even among the saints, Mental Health differs with the Type of Religion they follow. As the result suggests, Christianity had significantly low scoring on Mental Health, compared to other religions. The differences in the Mental Health of the saints of other two religions, namely, Hinduism and Jainism were non-significant. (Output. 2, Hypothesis: 4). This might be due to SRO – effect in religion. The interaction effect of Sex- Role Orientation and Type of Religion is found to be significant on MH (Output. 2, Hypothesis: 4, SRO x Type of Religion). As the Chi-Square Cross-tabulation of SRO and Type Religion suggests, the differences among different Types of Religions, with respect to differences in SRO are statistically

significant. Thus, saints of different religions differ significantly in their Sex-Role Orientations. As the cross-tabs suggest, Christianity had minimum proportion of Androgynous SRO (9.4%), as compared to other religions, and as discussed earlier, Androgynous SRO significantly facilitates Mental Health. This being so, having less number of the Androgynous saints within Christianity, may be responsible for minimum Mental Health scores in Christianity.

As discussed earlier, lacking in Androgyny is compensated by education in facilitating Mental Health. So analyzing the educational levels among different religions, we find that compared to other religions, Christianity had minimum proportion of undergraduates (1.8%) and the highest proportion of saints with graduation (50.9%) and education of more than PG (21.1 %) as compared to other religions. (Output. 34, Hypothesis: 51) Thus, from the four educational levels of UG, Graduate, PG and more than PG- in the three educational categories of UG, Graduate and more than PG- Christianity represents maximum education in comparison with other religions and these differences of Christianity with other religions with respect to education were statistically significant as the chi-square cross tabulation of education and Type of Religion suggests. (Output. 34, Hypothesis: 51)

Thus, compared to other religions, educational level is higher among Christian saints. Even then, higher education has not produced significant effect on the Mental Health of Christian saints. The discussion of the Hypothesis-3 had led to the conclusion that education had more deep impact on Mental Health than the Androgynous SRO. But in case of Christian saints only, we find that

education does not compensate for Androgynous SRO to produce significant effect on Mental Health. As the results suggest, education in its interaction with religion type is found non-significant on Mental Health. (Output. 2, Hypothesis: 4). This means that primarily due to less amount of Androgynous SRO in Christianity, Mental Health is not found to be significantly high. Christianity, with its principles of love, sacrifice, and service, which are thought to be feminine qualities, had maximum proportions of feminine sex-role orientation after Buddhism. (Output. 2, Hypothesis: 4 (Extra), Sex-Role Orientation x Type of Religion). And as review of literature had suggested and as the findings of present research reinforced, feminity is correlated with less Mental Health scores as compared to Androgyny and Masculinity. This also implies that the measuring tools of Mental Health might underlie Masculine – bias, as pointed out by Marsh, Antill & Cunningham (1987) also, which needs to be checked from feminist point of view.

Another plausible explanation of these differences in the Mental Health of different religions may be attributed to cultural differences. The other three religions are Eastern, while Christianity has Western cultural background. This being so, it is quite possible that Christian saints also might have internalized those personality traits of Western competitive culture, which are more prone to stress and anxiety affecting the Mental Health negatively.

In other words, lower scoring of Christianity may be due to lower Androgyny, which in turn may be due to cultural impact, as found in the study of Ravinder Shasi (1987). R. Shasi had found the traditional culture of India to be more Androgynous than that of West.

In short, Hinduism had maximum MH scoring (180.250) than Jainism (178.06) and Christianity (159.097) had. The difference between Hinduism and Jainism on MH was not significant. Christianity had significantly less and minimum scoring on MH. Christianity, which might be attributed either to positive preponderance of feminity in Christianity, or to the cultural differences or to the Masculine bias of Mental Health scale.

Univariate Analysis of Variance: Output: 3, Hypothesis: 5

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	20
	1	Androgynous	76
	2	Masculine	28
	3	Feminine	39
Type of Art	0	Dance & Drama	50
	1	Music	56
	2	Painting	57
Education	0	Under graduate	29
	1	Graduate	72
	2	Double & Post Graduate	46
	3	More than PG	16

Tests of Between-Subjects Effects

Dependent Variable: Mental Health

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	23790.146(a)	41	580.247	1.216	.207
Intercept	1928693.500	1	1928693.500	4041.754	.000
sro	2737.991	3	912.664	1.913	.131
arttype	669.750	2	334.875	.702	.498
educat	2940.979	3	980.326	2.054	.110
sro * arttype	4120.114	6	686.686	1.439	.205
sro * educat	4620.694	9	513.410	1.076	.385
arttype * educat	1966.256	6	327.709	.687	.661
sro * arttype * educat	4691.542	12	390.962	.819	.630
Error	57740.259	121	477.192		
Total	5099339.000	163			
Corrected Total	81530.405	162			

a R Squared = .292 (Adjusted R Squared = .052)

Hypothesis – 5:

The null hypothesis that there are no significant differences in the Mental Health of artists with different Types of Art is accepted here. (Output. 3, Hypothesis: 5). Artists scored significantly higher on Mental Health than the normals and saints (Output. 1), and norms-wise also, the artists' scoring on Mental Health belonged to 'Good Mental Health' as compared to the Average Mental Health of saints and normals. However, within the artists, there were no significant differences in the Mental Health of the Artists of different fields. The Type of art, like Dance / Drama, Painting/Sculpture and Music – had no significant effect on the Mental Health of artists. All the Types of Art studied here, had almost equal contribution in facilitating Mental Health. Thus, it is the worship of art itself, which facilitates the Mental Health, not the Type of Art being worshipped.

It is important to note here that Type of Religion was found to affect significantly the Mental Health of saints, but the Type of art had no significant effect on the Mental Health of Artists.

Univariate Analysis of Variance: Output: 4, Hypothesis: 6

Between-Subjects Factors

		Value Label	N
Type of Religion	1	Hinduism	33
	2	Christianity	55
	3	Jainism	35
Years of Experience	0	20 & less than 20	66
	1	more than 20	57

Tests of Between-Subjects Effects

Dependent Variable: Mental Health

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	14389.345(a)	5	2877.869	12.490	.000
Intercept	3233305.150	1	3233305.150	14032.900	.000
religiontype	11679.404	2	5839.702	25.345	.000
years	1.068	1	1.068	.005	.946
religiontype * years	1042.828	2	521.414	2.263	.109
Error	26957.842	117	230.409		
Total	3627396.000	123			
Corrected Total	41347.187	122			

a R Squared = .348 (Adjusted R Squared = .320)

Estimated Marginal Means

Type of Religion

Dependent Variable: Mental Health

Type of Religion	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Hinduism	180.250	2.875	174.557	185.943
Christianity	159.097	2.055	155.026	163.167
Jainism	178.060	2.567	172.977	183.144

Years of Experience

Dependent Variable: Mental Health

Years of Experience	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
20 & less than 20	172.568	1.887	168.832	176.305
more than 20	172.370	2.218	167.977	176.763

Post Hoc Tests

Type of Religion

Multiple Comparisons

Dependent Variable: Mental Health

LSD

(I) Type of Religion	(J) Type of Religion	Mean Difference (I-J)	Std. Error	Sig.
Hinduism	Christianity	22.81(*)	3.342	.000
	Jainism	4.12	3.683	.265
Christianity	Hinduism	-22.81(*)	3.342	.000
	Jainism	-18.69(*)	3.282	.000
Jainism	Hinduism	-4.12	3.683	.265
	Christianity	18.69(*)	3.282	.000

Based on observed means.

* The mean difference is significant at the .05 level.

Hypothesis – 6:

The null hypothesis that there are no significant differences in the Mental Health of saints with different years of experience is accepted here. (Output. 4, Hypothesis: 6). As the mean differences suggest, the Mental Health of the saints with their renunciate life for more than 20 years, was not significantly higher than the Mental Health of saints with renunciation of 20 or less than 20 years.

Univariate Analysis of Variance: Output: 5, Hypothesis: 7

Between-Subjects Factors

		Value Label	N
Type of Art	0	Dance & Drama	49
	1	Music	49
	2	Painting	58
Years of Experience	0	20 & less than 20	69
	1	more than 20	87

Tests of Between-Subjects Effects

Dependent Variable: Mental Health

	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3318.610(a)	5	663.722	1.274	.278
Intercept	4518282.724	1	4518282.724	8672.968	.000
arttype	980.402	2	490.201	.941	.393
years	1869.031	1	1869.031	3.588	.060
arttype * years	1060.538	2	530.269	1.018	.364
Error	78144.229	150	520.962		
Total	4884547.000	156			
Corrected Total	81462.840	155			

a R Squared = .041 (Adjusted R Squared = .009)

Estimated Marginal Means

Years of Experience

Dependent Variable: Mental Health

Years of Experience	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
20 & less than 20	171.451	2.826	165.867	177.036
more than 20	178.570	2.478	173.675	183.465

T-Test

Group Statistics

	Mental Health Years of Experience	
	more than 20	20 & less than 20
N	144	135
Mean	174.71	171.98
Std. Deviation	23.030	18.922
Std. Error Mean	1.919	1.629

Independent Samples Test

			Mental Health	
			Equal variances assumed	**Equal variances not assumed**
Levene's Test for Equality of Variances	F		.151	
	Sig.		.698	
t-test for Equality of Means	t		1.078	1.085
	df		277	272.373
	Sig. (2-tailed)		.282	.279
	Mean Difference		2.731	2.731
	Std. Error Difference		2.533	2.517
	95% Confidence Interval of the Difference	Lower	-2.256	-2.225
		Upper	7.717	7.686

Hypothesis – 7:

The null hypothesis that there are no significant differences in the Mental Health of artists with different years of experience of art is accepted here through the empirical findings of present research. Because years of experience had only two values, T-test was also performed, which also showed non-significant effect on MH. (Output. 5, Hypothesis: 7). This means that years of experience of the artists have no significant effect on the Mental Health of the artists. In short, the quantitative measure of the years of experience, neither in art nor in spirituality, has any significant effect on Mental Health.

Univariate Analysis of Variance: Output: 6, Hypothesis: 8

Between-Subjects Factors

		Value Label	N
Age	0	1-25	164
	1	26-50	140
	2	51-90	59

Tests of Between-Subjects Effects

Dependent Variable: Mental Health

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	569.341(a)	2	284.670	.669	.513
Intercept	8957505.674	1	8957505.674	21059.132	.000
age	569.341	2	284.670	.669	.513
Error	153126.070	360	425.350		
Total	11123361.000	363			
Corrected Total	153695.410	362			

a R Squared = .004 (Adjusted R Squared = -.002)

T-Test Output: 7, Hypothesis: 9

Group Statistics

	Mental Health	
	Gender	
	Male	Female
N	204	236
Mean	174.41	172.05
Std. Deviation	19.195	21.095
Std. Error Mean	1.344	1.373

Independent Samples Test

			Mental Health	
			Equal variances assumed	**Equal variances not assumed**
Levene's Test for Equality of Variances	F		.168	
	Sig.		.682	
t-test for Equality of Means	T		1.223	1.231
	Df		438	436.833
	Sig. (2-tailed)		.222	.219
	Mean Difference		2.365	2.365
	Std. Error Difference		1.935	1.921
	95% Confidence Interval of the Difference	Lower	-1.437	-1.411
		Upper	6.167	6.141

Hypothesis - 8 & 9:

The null hypotheses that Age and Gender have no significant effect on Mental Health are accepted. (Output. 6-7, Hypothesis: 8 &9). Thus, subjects with different Age – groups do not differ significantly in their Mental Health. Similarly males and females also do not differ significantly with respect to Mental Health.

Here ends the discussions of the effect of eight Independent variables like SRO, TP, TR, TA, Education, Years of Experience, Age, and Gender on the Dependent variable of Mental Health.

2. Emotional Competence Analysis:

Univariate Analysis of Variance: Output: 8, Hypothesis: 10-12

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	71
	1	Androgynous	156
	2	Masculine	52
	3	Feminine	112
Type of Person	0	Normals	124
	1	Saints	105
	2	Artists	162
Education	0	Under graduate	61
	1	Graduate	147
	2	Double & Post Graduate	114
	3	More than PG	69

Tests of Between-Subjects Effects

Dependent Variable: Emotional Competence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	95976.186(a)	47	2042.047	2.121	.000
Intercept	15101919.593	1	15101919.593	15683.376	.000
sro	22366.477	3	7455.492	7.743	.000
person	5607.260	2	2803.630	2.912	.056
educat	9529.172	3	3176.391	3.299	.021
sro * person	6495.690	6	1082.615	1.124	.348
sro * educat	17430.075	9	1936.675	2.011	.037
person * educat	2863.671	6	477.279	.496	.812
sro * person * educat	22919.126	18	1273.285	1.322	.171
Error	330283.379	343	962.925		
Total	30748365.000	391			
Corrected Total	426259.565	390			

a R Squared = .225 (Adjusted R Squared = .119)

Estimated Marginal Means

Sex-role Orientation

Dependent Variable: Emotional Competence

Sex-role Orientation	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Undifferentiated	257.884	5.607	246.856	268.912
Androgynous	287.318	3.021	281.376	293.259
Masculine	274.912	4.913	265.249	284.576
Feminine	275.668	3.444	268.894	282.443

Type of Person

Dependent Variable: Emotional Competence

Type of Person	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Normals	269.657	3.831	262.123	277.192
Saints	271.404	4.221	263.102	279.706
Artists	280.776	3.252	274.379	287.172

Education

Dependent Variable: Emotional Competence

Education	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Under graduate	267.263	5.468	256.508	278.019
Graduate	268.000	3.072	261.957	274.043
Double & Post Graduate	276.075	3.616	268.962	283.187
More than PG	284.444	4.914	274.780	294.109

Post Hoc Tests
Sex-role Orientation

Multiple Comparisons

Dependent Variable: Emotional Competence
LSD

(I) Sex-role Orientation	(J) Sex-role Orientation	Mean Difference (I-J)	Std. Error	Sig.
Undifferentiated	Androgynous	-25.39(*)	4.442	.000
	Masculine	-13.75(*)	5.664	.016
	Feminine	-15.04(*)	4.707	.002
Androgynous	Undifferentiated	25.39(*)	4.442	.000
	Masculine	11.64(*)	4.969	.020
	Feminine	10.35(*)	3.843	.007
Masculine	Undifferentiated	13.75(*)	5.664	.016
	Androgynous	-11.64(*)	4.969	.020
	Feminine	-1.29	5.207	.805
Feminine	Undifferentiated	15.04(*)	4.707	.002
	Androgynous	-10.35(*)	3.843	.007
	Masculine	1.29	5.207	.805

Based on observed means.
* The mean difference is significant at the .05 level.

Type of Person

Multiple Comparisons

Dependent Variable: Emotional Competence
LSD

(I) Type of Person	(J) Type of Person	Mean Difference (I-J)	Std. Error	Sig.
Normals	Saints	-4.23	4.115	.305
	Artists	-6.30	3.703	.090
Saints	Normals	4.23	4.115	.305
	Artists	-2.07	3.888	.595
Artists	Normals	6.30	3.703	.090
	Saints	2.07	3.888	.595

Based on observed means.

Education

Multiple Comparisons

Dependent Variable: Emotional Competence
LSD

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.
Under graduate	Graduate	4.32	4.726	.361
	Double & Post Graduate	-1.53	4.923	.756
	More than PG	-4.75	5.454	.385
Graduate	Under graduate	-4.32	4.726	.361
	Double & Post Graduate	-5.85	3.873	.132
	More than PG	-9.07(*)	4.528	.046
Double & Post Graduate	Under graduate	1.53	4.923	.756
	Graduate	5.85	3.873	.132
	More than PG	-3.21	4.733	.498
More than PG	Under graduate	4.75	5.454	.385
	Graduate	9.07(*)	4.528	.046
	Double & Post Graduate	3.21	4.733	.498

Based on observed means.
* The mean difference is significant at the .05 level.

Univariate Analysis of Variance: OUTPUT: 8, HYPOTHESIS: 12 (A)

Estimated Marginal Means

Sex-role Orientation * Education

Dependent Variable: Emotional Competence

Sex-role Orientation	Education	Mean	Std. Error
Undifferenciated	Under graduate	235.500	12.903
	Graduate	254.000	5.587
	Double & Post Graduate	275.100	7.067
	More than PG	274.923	8.766
Androgynous	Under graduate	293.174	6.590
	Graduate	283.407	4.301
	Double & Post Graduate	289.151	4.341
	More than PG	288.231	6.198
Masculine	Under graduate	273.727	9.530
	Graduate	269.789	7.251
	Double & Post Graduate	273.083	9.124
	More than PG	293.600	9.995
Feminine	Under graduate	278.143	6.897
	Graduate	280.786	4.877
	Double & Post Graduate	270.897	5.869
	More than PG	278.100	7.067

Hypothesis - 10:

The null hypothesis that there are no significant differences in the Emotional Competence of subject with different Sex-Role Orientations is rejected through the findings of present research. (Output. 8, Hypothesis: 10). That is, Sex-Role Orientation has significant effect upon Emotional Competence (EC). As the LSD analysis suggests, the Androgynous scored (287.318) significantly higher on EC-scale than all the other three SROs, i.e., the Masculine (274.912), the Feminine (275.668) and the Undifferentiated (257.884). This result is quite consistent with Mental Health results.

Mental Health was also found to be highest with the Androgynous and the lowest with the Undifferentiated. As Emotional Competence constitutes an important aspect of Mental Health, it is quite logical to have the same results for Mental Health and EC, and the differences were significant for EC too.

However, the Mental Health and the Emotional Competence scores of the Masculine and the Feminine SRO differed. After the Androgynous, the Masculine had higher Mental Health score (172.970) than the Feminine (170.632), though this difference was not significant. While in case of EC, after the Androgynous (287.318), the Feminine (275.668) scored higher than the Masculine (274.912), though this difference was also non-significant. This subtle difference in the Mental Health and EC scores of the Feminine indirectly supports the stereotyped emotionality of feminity. Conventionally, emotions are considered to be more prominent traits of females than the males. So, Emotional Competence was also found to be higher in the Feminine SRO than the Masculine. In short, Androgyny and a bend of feminity are found to facilitate Emotional Competence.

Another important distinction between the Mental Health results and the EC results was that the Mental Health of the Androgynous did not differ significantly from the Mental Health of the Masculine. Thus, as the review of literature had shown, Androgyny and Masculinity both are found to facilitate Mental Health. In present research also, though Androgyny is found to be most effective for Mental Health, its difference with the effect of masculinity was not significant.

In short, in case of Mental Health, Androgyny and Masculinity both are found to facilitate Mental Health. While in case of Emotional Competence, the Androgynous differed significantly not only from the Masculine, but also from the Feminine. So, though the Feminine scored higher on EC after the Androgynous, the difference between the Androgynous and the Feminine on EC score was also significant. This means that Androgyny facilitates EC even more significantly than the feminity. The reason might be that emotionality, which may be viewed as the Feminine trait, is quite different from the Emotional Competence. As the EC scale used here suggests, Emotional Competence underlies proper expression and control of emotions, adequate functioning with emotions, ability to cope with problem emotions etc. all of which are quite different from emotionality.

Emotionality as feminine trait might be responsible for the small difference in EC score of the feminine and the masculine (though this difference was not significant), but it is the Emotional Competence, which makes significant difference between the Androgynous and the Feminine. A person may be emotional but not necessarily emotionally competent. This might be the reason why feminity, which is considered to be seat of emotions, was not found to facilitate EC as effectively as the Androgynous.

Hypothesis - 11:

The null hypothesis that saints, artists, and normals do not differ significantly with respect to Emotional Competence is accepted (Output. 8, Hypothesis. 11). This means that type of person has no significant effect on EC. Though estimated means suggest that artists

scored (280.776) maximum on EC than saints (271.404) and normals (269.657) just like Mental Health too, the difference on the EC-score among them was not significant.

Hypothesis - 12:

The null hypothesis that there are no significant differences in the EC of subjects with different educational level is also rejected. (Output. 8, Hypothesis. 12). Education had significant effect on EC like Mental Health. In case of Mental Health, except the difference between the Mental Health of UG and graduates, the Mental Health was found to be gradually increasing with higher education of PG and more than PG. In case of EC, the scoring of UG was also no exception. The EC was found to increase gradually with education from UG to more than PG. Thus, undergraduates (UG) had minimum EC-score (267.263), while subjects with more than PG education had maximum EC-scores (284.444); EC-scores increased respectively among Undergraduates (267.263), Graduates (268.000), Double/Post Graduate (276.075), and subjects with education more than PG (284.444). This means that formal education significantly facilitates Emotional Competence in general. However, LSD suggests that within the various educational levels, only the difference between the graduates and the Ss with more than PG education was significant, which might be due to the significant effect of the interaction of Education with SRO. In short, ANOVA table shows significant effect of Education on EC.

It is common-sense belief and supported empirically by a number of studies (Coleman J.C., 1983) also that education facilitates

personality growth primarily through cognitive change, i.e. through the changes in perceptions and attitudes. But the results of present research suggest that education facilitates emotional growth too. However, as the Rational Emotive Therapy (RET) of Ellis implies, cognitions play important role in one's emotional experience too. Accordingly, it is the cognitions and perceptions, which guide our emotions. So, it can also be said that education increases Emotional Competence, as found in present research, through perceptual and cognitive changes as Coleman had suggested.

It is important to note here that in case of Mental Health, the undergraduates' higher scoring on MH was ascribed to the informal but high-quality education of undergraduate saints and artists. While in case of EC this informal education did not seem to contribute to enhance EC that is why UG have scored minimum on EC. This means that it is only formal college education, which facilitates EC through change in cognitions and perceptions.

Secondly, like Mental Health, EC was also found to have significant effect due to interaction of Education with Sex-Role Orientation. (Output. 8, Hypothesis: 12(A)) As the mean differences suggest, the Androgynous had significantly higher EC-scores among all the educational levels barring more than PG Education of the Masculine. Comparing the interactions of four SRO and four Education categories, we find that the Androgynous undergraduates (293.174), the Masculine with more than PG education (293.600), the Feminine graduates (280.786) and the Undifferentiated double / postgraduates (275.100) had maximum EC scores. Thus, in different sex –role orientations, different educational level has yielded highest

EC-scores. Here also Like MH, Androgyny noticeably facilitates EC even more than education, because even the undergraduates, have scored highest (293.100) with Androgynous SRO. In short, the interaction between SRO and Education was significant with respect to EC-scores.

Univariate Analysis of Variance: Output: 9, Hypothesis: 13

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	22
	1	Androgynous	33
	2	Masculine	11
	3	Feminine	39
Type of Religion	1	Hinduism	30
	2	Christianity	57
	3	Jainism	18
Education	0	Under graduate	20
	1	Graduate	39
	2	Double & Post Graduate	29
	3	More than PG	17

Tests of Between-Subjects Effects

Dependent Variable: Emotional Competence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	76752.589(a)	32	2398.518	4.418	.000
Intercept	2995180.280	1	2995180.280	5517.219	.000
sro	3855.250	3	1285.083	2.367	.078
religiontype	10112.201	2	5056.101	9.314	.000
educat	1610.090	3	536.697	.989	.403
sro * religiontype	5136.073	6	856.012	1.577	.166
sro * educat	5826.389	8	728.299	1.342	.237
religiontype * educat	6502.100	5	1300.420	2.395	.046
sro * religiontype * educat	6930.150	4	1732.537	3.191	.018
Error	39087.258	72	542.879		
Total	8286913.000	105			
Corrected Total	115839.848	104			

a R Squared = .663 (Adjusted R Squared = .513)

Estimated Marginal Means

Type of Religion

Dependent Variable: Emotional Competence

Type of Religion	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Hinduism	296.359(a)	5.096	286.201	306.517
Christianity	256.501(a)	4.043	248.441	264.560
Jainism	289.912(a)	7.325	275.310	304.514

a Based on modified population marginal mean.

Type of Religion * Education

Dependent Variable: Emotional Competence

Type of Religion	Education	Mean	Std. Error
Hinduism	Under graduate	311.417(a)	9.512
	Graduate	276.000	9.512
	Double & Post Graduate	315.521	9.362
	More than PG	276.167(a)	13.452
Christianity	Under graduate	197.000(a)	23.300
	Graduate	255.285	5.489
	Double & Post Graduate	256.800	6.381
	More than PG	272.292	8.238
Jainism	Under graduate	293.262(a)	9.955
	Graduate	311.000(a)	16.475
	Double & Post Graduate	283.600(a)	10.420
	More than PG	244.000(a)	23.300

a Based on modified population marginal mean.

Post Hoc Tests Type of Religion

Multiple Comparisons

Dependent Variable: Emotional Competence

LSD

(I) Type of Religion	(J) Type of Religion	Mean Difference (I-J)	Std. Error	Sig.
Hinduism	Christianity	41.02(*)	5.255	.000
	Jainism	22.00(*)	6.947	.002
Christianity	Hinduism	-41.02(*)	5.255	.000
	Jainism	-19.02(*)	6.300	.004
Jainism	Hinduism	-22.00(*)	6.947	.002
	Christianity	19.02(*)	6.300	.004

Based on observed means.

* The mean difference is significant at the .05 level.

Education

Multiple Comparisons

Dependent Variable: Emotional Competence
LSD

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.
Under graduate	Graduate	20.50(*)	6.408	.002
	Double & Post Graduate	8.67	6.772	.205
	More than PG	16.25(*)	7.686	.038
Graduate	Under graduate	-20.50(*)	6.408	.002
	Double & Post Graduate	-11.83(*)	5.713	.042
	More than PG	-4.25	6.772	.532
Double & Post Graduate	Under graduate	-8.67	6.772	.205
	Graduate	11.83(*)	5.713	.042
	More than PG	7.58	7.117	.291
More than PG	Under graduate	-16.25(*)	7.686	.038
	Graduate	4.25	6.772	.532
	Double & Post Graduate	-7.58	7.117	.291

Based on observed means.
* The mean difference is significant at the .05 level.

Hypothesis – 13:

The null hypothesis that there are no significant differences in the Emotional Competence of saints with different religions is rejected (Output. 9, Hypothesis: 13). Thus, Type of Religion had significant effect on the EC of saints. As the LSD results suggest, Christianity had significantly lower EC-scores (256.501) than Jainism (289.912) and Hinduism (296.359). If we see the proportion of various SRO within particular religion (Output. 30, Hypothesis: 47, SRO x TR), we find that Jainism had maximum Androgynous SRO (38.7%) within all the four religions and all the four SRO. This means that in case of

Jainism, Androgyny has contributed most significantly in yielding highest EC-scores of Jainism. Though Christianity had maximum feminine SRO than the other three SRO, the EC is not maximum, rather minimum in Christianity. This conforms the previous contention that though stereotypically feminity is associated with emotions, feminity does not necessarily imply EC.

The interaction effect of Type of Religion and Education is also significant on EC. (Output. 9, Hypothesis: 13, TR x EDU.) Hindu Postgraduates (311.417), Christian saints with more than PG education, (272.292) and Jain undergraduate saints (293.262) scored higher on EC. Thus, different educational level had different effect on EC in different religions.

One of the very important aspects of this result is that, as discussed earlier, SRO, Education, (Output. 8) and Type of Religion (Output. 9) had significant effects on EC independently. Not only that but the interaction of these three main factors namely SRO, Type of Religion, and Education Output. 9), also had significant effect on the Emotional Competence of saints. This means that effects of Sex-Role Orientation, Type of Religion, and Education, together with the significant results of their interaction effect, are more profound on EC than on Mental Health in case of saints.

Univariate Analysis of Variance: Output: 10, Hypothesis: 14

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	20
	1	Androgynous	75
	2	Masculine	28
	3	Feminine	39
Type of Art	0	Dance & Drama	50
	1	Music	56
	2	Painting	56
Education	0	Under graduate	29
	1	Graduate	71
	2	Double & Post Graduate	46
	3	More than PG	16

Tests of Between-Subjects Effects

Dependent Variable: Emotional Competence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	69540.494(a)	41	1696.110	2.108	.001
Intercept	4835771.979	1	4835771.979	6010.508	.000
sro	11525.506	3	3841.835	4.775	.004
arttype	2389.476	2	1194.738	1.485	.231
educat	7947.789	3	2649.263	3.293	.023
sro * arttype	12101.885	6	2016.981	2.507	.025
sro * educat	11335.542	9	1259.505	1.565	.133
arttype * educat	9654.108	6	1609.018	2.000	.071
sro * arttype * educat	14867.074	12	1238.923	1.540	.119
Error	96546.352	120	804.553		
Total	12960579.000	162			
Corrected Total	166086.846	161			

a R Squared = .419 (Adjusted R Squared = .220)

Estimated Marginal Means

Sex-role Orientation * Type of Art

Dependent Variable: Emotional Competence

Sex-role Orientation	Type of Art	Mean	Std. Error
Undifferentiated	Dance & Drama	191.000(a)	28.365
	Music	261.750	9.155
	Painting	278.333(a)	12.508
Androgynous	Dance & Drama	282.103	7.756
	Music	301.226	7.501
	Painting	285.421	8.440
Masculine	Dance & Drama	291.400(a)	11.708
	Music	284.917	9.601
	Painting	279.042	10.235
Feminine	Dance & Drama	259.292	10.832
	Music	268.097	8.523
	Painting	288.689(a)	11.708

a Based on modified population marginal mean.

Type of Art * Education

Dependent Variable: Emotional Competence

Type of Art	Education	Mean	Std. Error
Dance & Drama	Under graduate	248.167(a)	14.949
	Graduate	259.081	8.661
	Double & Post Graduate	286.984(a)	7.147
	More than PG	294.500(a)	17.370
Music	Under graduate	267.625	10.028
	Graduate	267.556	6.804
	Double & Post Graduate	280.685	8.616
	More than PG	300.125	9.155
Painting	Under graduate	288.625	9.645
	Graduate	285.750	6.538
	Double & Post Graduate	269.729	11.397
	More than PG	291.250(a)	17.370

a Based on modified population marginal mean.

Hypothesis – 14:

The null hypothesis that there are no significant differences in the EC of artists with different Types of Art is accepted. (Output. 10, Hypothesis: 14). This means that Type of art, being worshipped, has no significant effect on the EC of the artists. This result is similar to that of Mental Health. However, in case of Mental Health, Type of art had neither main nor any interaction effect on Mental Health, while in case of EC, we find that Type of Art has no significant effect on EC independently, but in its interaction with SRO, Type of Art has significant effect on EC. As the mean differences suggest, the Androgynous had maximum EC-scores (301.226) in music, while the Masculine had maximum EC-score in dance/drama. The Feminine artists had maximum EC-score in Painting/Sculpture. This implies that if the person is Androgynous, music can best facilitate his EC. Similarly, if the person is Masculine, dance and drama can help best to increase one's Emotional Competence, and if the person is Feminine, Painting/Sculpture can help best to increase one's Emotional Competence. Lastly, the person with Undifferentiated SRO are best benefited by Painting/Sculpture to increase their Emotional Competence.

This finding of the contribution of different arts in enhancing one's EC for the persons with different Sex-Role Orientations can be applied for counseling purpose too. Emotional incompetence constitutes a major factor in creating maladjustment and behavioral disorders; so one can be advised to worship one or the other Type of Art as per his/her Sex-Role Orientation, to enhance one's Emotional Competence and thereby to facilitate adjustment.

Univariate Analysis of Variance: Output: 11, Hypothesis: 15

Between-Subjects Factors

		Value Label	N
Type of Religion	1	Hinduism	32
	2	Christianity	55
	3	Jainism	35
Years of Experience	0	20 & less than 20	66
	1	more than 20	56

Tests of Between-Subjects Effects

Dependent Variable: Emotional Competence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	40305.968(a)	5	8061.194	9.919	.000
Intercept	8452576.338	1	8452576.338	10400.501	.000
religiontype	29328.101	2	14664.051	18.043	.000
years	79.931	1	79.931	.098	.754
religiontype * years	4840.283	2	2420.141	2.978	.055
Error	94274.196	116	812.709		
Total	9746478.000	122			
Corrected Total	134580.164	121			

a R Squared = .299 (Adjusted R Squared = .269)

Estimated Marginal Means

Years of Experience

Dependent Variable: Emotional Competence

Years of Experience	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
20 & less than 20	282.625	3.543	275.607	289.643
more than 20	284.368	4.284	275.883	292.854

Hypothesis - 15:

The null hypothesis that there are no significant differences in the EC of saints with different years of renunciation is accepted here. (Output. 11, Hypothesis: 15).

Univariate Analysis of Variance: Output: 12, Hypothesis: 16

Between-Subjects Factors

		Value Label	N
Type of Art	0	Dance & Drama	49
	1	Music	48
	2	Painting	57
Years of Experience	0	20 & less than 20	69
	1	more than 20	85

Tests of Between-Subjects Effects

Dependent Variable: Emotional Competence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3044.655(a)	5	608.931	.570	.723
Intercept	11475810.969	1	11475810.969	10747.913	.000
arttype	1746.946	2	873.473	.818	.443
years	931.761	1	931.761	.873	.352
arttype * years	1250.980	2	625.490	.586	.558
Error	158023.241	148	1067.725		
Total	12323310.000	154			
Corrected Total	161067.896	153			

a R Squared = .019 (Adjusted R Squared = -.014)

Hypothesis - 16:

The null hypothesis that there are no significant differences in the EC of artist with different years of experience is also accepted. (Output. 12, Hypothesis: 16).

Thus, the years of renunciate life led by saints had no significant effect on the EC of saints. Similarly, years of experience in particular field of art also had so significant effect on the EC of artists. This result is same for Mental Health too.

Univariate Analysis of Variance: Output: 13, Hypothesis: 17

Between-Subjects Factors

		Value Label	N
Age	0	1-25	164
	1	26-50	140
	2	51-90	56

Tests of Between-Subjects Effects

Dependent Variable: Emotional Competence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	589.968(a)	2	294.984	.277	.758
Intercept	22650703.986	1	22650703.986	21283.536	.000
age	589.968	2	294.984	.277	.758
Error	379932.229	357	1064.236		
Total	28563657.000	360			
Corrected Total	380522.197	359			

a R Squared = .002 (Adjusted R Squared = -.004)

T-Test OUTPUT: 14, Hypothesis: 18

Group Statistics

	Emotional Competence	
	Gender	
	Male	Female
N	202	236
Mean	280.78	278.15
Std. Deviation	34.673	30.807
Std. Error Mean	2.440	2.005

Independent Samples Test

			Emotional Competence	
			Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F		2.529	
	Sig.		.112	
t-test for quality of Means	t		.839	.831
	df		436	405.897
	Sig. (2-tailed)		.402	.406
	Mean Difference		2.625	2.625
	Std. Error Difference		3.129	3.158
	95% Confidence Interval of the Difference	Lower	-3.526	-3.583
		Upper	8.775	8.833

Hypothesis – 17 & 18:

The null hypothesis that there are no significant differences in the EC of subjects with different age groups is accepted here (Output. 13, Hypothesis; 17).

Similarly, the null hypothesis that there are no significant differences in the EC of males and females is also accepted. (Output. 14, Hypothesis: 18). The Masculine and the Feminine Sex-Role Orientation of the subject irrespective of their biological sex also had no significant differences in EC.

In short, the biological factors like age and gender nor the quantitative factor like years of experience have significant effect neither on Mental Health nor on EC. As all the subjects studied here were adults, we can conjecture that age or gender may have significant effect on EC or Mental Health in growing age, till adulthood, but not after adulthood.

3. Self – Actualization Analysis:

Univariate Analysis of Variance: Output: 15, Hypothesis: 19-21

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	73
	1	Androgynous	158
	2	Masculine	52
	3	Feminine	113
Type of Person	0	Normals	130
	1	Saints	105
	2	Artists	161
Education	0	Under graduate	61
	1	Graduate	146
	2	Double & Post Graduate	119
	3	More than PG	70

Tests of Between-Subjects Effects

Dependent Variable: Self-Actualization

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	28725.906(a)	47	611.189	2.238	.000
Intercept	6011765.534	1	6011765.534	22008.539	.000
sro	3703.696	3	1234.565	4.520	.004
person	4146.935	2	2073.467	7.591	.001
educat	1199.208	3	399.736	1.463	.224
sro * person	1556.874	6	259.479	.950	.459
sro * educat	703.749	9	78.194	.286	.978
person * educat	1621.432	6	270.239	.989	.432
sro * person * educat	7310.717	18	406.151	1.487	.092
Error	95058.304	348	273.156		
Total	12161501.000	396			
Corrected Total	123784.210	395			

a R Squared = .232 (Adjusted R Squared = .128)

Estimated Marginal Means

Sex-role Orientation

Dependent Variable: Self-Actualization

b	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Undifferentiated	168.292	2.978	162.434	174.150
Androgynous	178.436	1.605	175.280	181.593
Masculine	170.236	2.617	165.090	175.383
Feminine	173.095	1.829	169.499	176.691

Type of Person

Dependent Variable: Self-Actualization

Type of Person	**Mean**	**Std. Error**	**95% Confidence Interval**	
			Lower Bound	**Upper Bound**
Normals	170.867	2.028	166.878	174.856
Saints	168.257	2.248	163.836	172.679
Artists	178.420	1.733	175.012	181.828

Post Hoc Tests
Sex-role Orientation

Multiple Comparisons

Dependent Variable: Self-Actualization
LSD

(I) Sex-role Orientation	(J) Sex-role Orientation	Mean Difference (I-J)	Std. Error	Sig.
Undifferentiated	Androgynous	-13.64(*)	2.339	.000
	Masculine	-6.88(*)	2.999	.022
	Feminine	-7.27(*)	2.482	.004
Androgynous	Undifferentiated	13.64(*)	2.339	.000
	Masculine	6.76(*)	2.642	.011
	Feminine	6.37(*)	2.036	.002
Masculine	Undifferentiated	6.88(*)	2.999	.022
	Androgynous	-6.76(*)	2.642	.011
	Feminine	-.40	2.770	.886
Feminine	Undifferentiated	7.27(*)	2.482	.004
	Androgynous	-6.37(*)	2.036	.002
	Masculine	.40	2.770	.886

Based on observed means.
* The mean difference is significant at the .05 level.

Type of Person

Multiple Comparisons

Dependent Variable: Self-Actualization
LSD

(I) Type of Person	(J) Type of Person	Mean Difference (I-J)	Std. Error	Sig.
Normals	Saints	1.07	2.169	.621
	Artists	-8.11(*)	1.949	.000
Saints	Normals	-1.07	2.169	.621
	Artists	-9.18(*)	2.073	.000
Artists	Normals	8.11(*)	1.949	.000
	Saints	9.18(*)	2.073	.000

Based on observed means.
* The mean difference is significant at the .05 level.

Hypothesis – 19:

The null hypothesis that there are no significant differences in the Self – actualization of the subject with different Sex-Role Orientations, is rejected (Output. 15, Hypothesis: 19). That is, Sex-Role Orientations had significant effect on person's Self-actualization. As the results suggest, like Mental Health and Emotional Competence, the Self – actualization was also found to be functionally associated with SRO. As the mean differences suggest, the Androgynous persons were most Self-actualized than the Feminine, Masculine and the Undifferentiated respectively. The Androgynous SRO had significantly higher SEA – scores (178.436) than the Feminine (173.095), Masculine (170.236), and the Undifferentiated (168.292). The Feminine and the Masculine had also significantly higher SEA – scores than the Undifferentiated. However, the difference between the Feminine and the Masculine on SEA – scores was not statistically significant, like Mental Health and EC too.

This finding is quite consistent with the conjecture made initially. According to Maslow's theory of hierarchy of needs, Self – actualization represents the highest level of personality development, where the latent human potentials are unfolded fully. This highest state of personality development can be thought of as the state of personality integration. And Androgyny also represents the integration of the two so called polar aspects of human nature i.e. the Masculine and the Feminine, 'anima' and 'animus'. A state of personality integration where the Anima and the Animus within one's own personality are integrated must be the highest state of personality development. Thus, Androgyny and Self – actualization

both imply highest level of personality development and integration, and hence both must be associated. On the basis of this argument, it was hypothesized that the Androgynous Ss must be found to score highest on SEA than the other three SRO. The results of present research substantiated this argument empirically, yielding the highest SEA- Scores of the Androgynous.

This finding substantiates the previous finding of Endo K. & Hasimoto (1998), which also showed that the Ss with Androgynous or Masculine SRO were more Self-Actualized than the Feminine and the Undifferentiated. Kimlicka et al (1987) also found that Androgynous SRO was significantly correlated with SEA in females. However, the detrimental effect of Feminine SRO on SEA, as reported in the study by Endo & Hasimoto (1998) is not substantiated here. Secondly, in Endo's study, the Masculine scored significantly higher than the Feminine on SEA, while in present research there was no significant difference between the Feminine and the Masculine on SEA score.

Unlike Mental Health and just like EC, SEA-scores of the Feminine SRO were higher than the Masculine, though this difference was non-significant. A little higher SEA score of the Feminine than the Masculine might be due to the general association of feminity with intuitive faculty and of masculinity with rationality. Intuitive dimension is thought to be more conducive to creativity and self–actualization than the Masculine rationality. This might be the distant underlying cause for a little higher SEA score of the Feminine than the Masculine.

Hypothesis – 20:

The null hypothesis that there are no significant differences in the Self-actualization of saints, artists, and normals is also rejected (Output. 15, Hypothesis-20). This means that Type of Person had significant effect on Self – actualization. Like Mental Health and EC, the SEA scores were also highest with the artists as compared to the normals and saints. Though normals scored higher on SEA than the saints, the difference between the two was non-significant. The same results were found for Mental Health too. Only in case of EC, saints scored a little higher than the normals. However, for all the three variables – MH, EC & SEA- the mean differences between saints and normals were non-significant. Among all the three variables, artists had significantly highest scoring. Art itself constitutes creativity and unfoldment of one's potentials, which is the very defining characteristics o Self – actualization. Thus, artists' highest scoring on SEA is quite consistent with the very idea of Self – actualization as proposed by Maslow.

This finding is consistent with the study of Manheim A. R. (1998), where the relationship between the artistic process and Self-actualization was analyzed. Results showed that art and creativity were correlated with Self- actualization. Thus the finding, and the ex - planation of creativity given above are substantiated by the finding of Manheim.

Watson et al (1990) found that the scores on Religious Orientation Inventory (ROI) correlated positively with scores on Short Index of Self – actualization (SISA), an instrument derived from POI in 250 undergraduates. Thus Watson's study says that religious

orientation is positively correlated with SEA. Saints are thought to represent religious orientation in general, and they are not found to score higher on SEA. The reason might be that as Value-analysis suggested, saints had not significantly higher proportion of Religious values. (Output. 61, Hypothesis: 79) This means that according to Watson's finding, religious orientation *is* significantly correlated with SEA, but saints did not represent religious values here. Therefore, here saints do not have significantly higher SEA. While scoring of the data, the researcher had noticed that Christian saints had more bending towards democratic, rather than religious values. Similarly, Jain saints had more bending towards family values rather than religious values. This might be the reason why saints in present research were not found to represent religious values, and hence not having significantly higher score on SEA as Watson's study implied.

Hypothesis - 21:

The null hypothesis that there are no significant differences in SEA of Ss with different educational level is accepted here. (Output. 15, Hypothesis: 21) Unlike Mental Health and EC, here education had no significant effect on SEA either as main factor or in interaction with other variables. Education was found to affect Mental Health and EC of the person very significantly. Not only that but in interaction with SRO or other variables also education was found to affect Mental Health & EC significantly. But so far as Self – actualization was concerned, education had no significant effect either independently or interactively. The reason might be that Mental Health and EC constitute those personality variables which underlie 'cognitive

activity', if we used Hilgard, Etkinson & Etkinson's words. It is quite possible that education, by enhancing one's cognitive horizons, may affect one's Mental Health and EC. But Self-actualization, rather represents that state of creativity where firstly a state of 'cognitive passivity' comes and then this state of 'Incubation' as represented by cognitive passivity, finally culminates into sudden 'Illumination' which has been termed as 'Aha! Experience'. Self-actualization corresponds to this 'Aha! Experience' state. In other words, Self-actualization symbolizes the highest state of creativity which is unfolded fully only after incubatory period of cognitive passivity. This being so, education being cognitively very active endeavor apparently, might have no significant effect on SEA for which, cognitive passivity is more conductive.

This explanation gets partial empirical support in the finding of Hawkins and Clark (1989). They found that all groups of teachers and student teacher were less Self-actualized than non-education major. Teacher groups were more other-directed, less inner – directed, showed less capacity for intimate contact and were marginally lower in self-regard and hence in SEA.

It is important to note here that education had significant effect on SEA neither in general (Output. 15) nor among saints (Output. 16) nor among artists (Output. 17). However, as the LSD results (Output. 16) suggest, among the saints, the under graduates and the saints with education more than PG, both had significantly higher self – actualization than the graduates. The higher scoring of under graduates on SEA might be due to saints' informal teaching of high quality almost equal to more than PG level, because saints with more

than PG education had only significantly higher SEA score. So when undergraduate saints show significantly higher SEA than graduates, it can be interpreted that this is due to their informal higher education of more than PG quality. Education of more than PG quality only had significant effect on the self – actualization of saints. This means that with higher and higher education, especial of more than PG level, education plays its role in unfolding the deeper and deeper potentials of human personality leading to self – actualization.

In other words, graduation may be necessary, but not the sufficient level for the deeper unfoldment of human potentials leading to higher SEA. Education more than PG has been found to facilitate not only Mental Health and EC, but also SEA (Output. 1, Output. 8, Output. 16).

Univariate Analysis of Variance: Output: 16, Hypothesis: 22

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	22
	1	Androgynous	33
	2	Masculine	11
	3	Feminine	39
Type of Religion	1	Hinduism	30
	2	Christianity	57
	3	Jainism	18
Education	0	Under graduate	20
	1	Graduate	39
	2	Double & Post Graduate	29
	3	More than PG	17

Tests of Between-Subjects Effects

Dependent Variable: Self-Actualization

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	10868.760(a)	32	339.649	1.225	.236
Intercept	1114155.181	1	1114155.181	4018.237	.000
sro	1267.449	3	422.483	1.524	.216
religiontype	684.724	2	342.362	1.235	.297
educat	1706.050	3	568.683	2.051	.114
sro * religiontype	1981.282	6	330.214	1.191	.321
sro * educat	2251.016	8	281.377	1.015	.433
religiontype * educat	2041.552	5	408.310	1.473	.209
sro * religiontype * educat	499.874	4	124.969	.451	.772
Error	19963.773	72	277.275		
Total	3074860.000	105			
Corrected Total	30832.533	104			

a R Squared = .353 (Adjusted R Squared = .065)

Estimated Marginal Means

Type of Religion

Dependent Variable: Self-Actualization

Type of Religion	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Hinduism	170.545(a)	3.642	163.285	177.805
Christianity	163.888(a)	2.889	158.128	169.647
Jainism	172.680(a)	5.235	162.244	183.115

a Based on modified population marginal mean.

Education

Dependent Variable: Self-Actualization

Education	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Under graduate	172.623(a)	3.685	165.346	179.900
Graduate	164.394(a)	2.596	159.267	169.521
Double & Post Graduate	173.738(a)	2.259	169.277	178.198
More than PG	177.053(a)	3.569	170.006	184.100

a Based on modified population marginal mean.

Post Hoc Tests

Type of Religion

Multiple Comparisons

Dependent Variable: Self-Actualization
LSD

(I) Type of Religion	(J) Type of Religion	Mean Difference (I-J)	Std. Error	Sig.
Hinduism	Christianity	7.51(*)	3.756	.049
	Jainism	.14	4.965	.977
Christianity	Hinduism	-7.51(*)	3.756	.049
	Jainism	-7.36	4.502	.106
Jainism	Hinduism	-.14	4.965	.977
	Christianity	7.36	4.502	.106

Based on observed means.

* The mean difference is significant at the .05 level.

Education

Multiple Comparisons

Dependent Variable: Self-Actualization

LSD

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.
Under graduate	Graduate	10.32(*)	4.580	.027
	Double & Post Graduate	2.36	4.840	.628
	More than PG	-.30	5.493	.957
Graduate	Under graduate	-10.32(*)	4.580	.027
	Double & Post Graduate	-7.96	4.083	.055
	More than PG	-10.62(*)	4.839	.031
Double & Post Graduate	Under graduate	-2.36	4.840	.628
	Graduate	7.96	4.083	.055
	More than PG	-2.66	5.086	.603
More than PG	Under graduate	.30	5.493	.957
	Graduate	10.62(*)	4.839	.031
	Double & Post Graduate	2.66	5.086	.603

Based on observed means.

* The mean difference is significant at the .05 level.

Univariate Analysis of Variance: Output: 16 Hypothesis: 22(extra)

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	29
	1	Androgynous	48
	2	Masculine	13
	3	Feminine	50
Type of Religion	1	Hinduism	45
	2	Christianity	58
	3	Jainism	37

Tests of Between-Subjects Effects

Dependent Variable: Self-Actualization

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	6995.720(a)	11	635.975	2.072	.027
Intercept	2652080.808	1	2652080.808	8641.511	.000
sro	1671.090	3	557.030	1.815	.148
religiontype	1865.682	2	932.841	3.040	.051
sro * religiontype	3738.603	6	623.101	2.030	.066
Error	39283.216	128	306.900		
Total	4074279.000	140			
Corrected Total	46278.936	139			

a R Squared = .151 (Adjusted R Squared = .078)

Estimated Marginal Means

Type of Religion

Dependent Variable: Self-Actualization

Type of Religion	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Hinduism	165.474	3.150	159.241	171.708
Christianity	164.776	2.600	159.633	169.920
Jainism	175.170	3.589	168.069	182.271

Sex-role Orientation * Type of Religion

Dependent Variable: Self-Actualization

Sex-role Orientation	Type of Religion	Mean	Std. Error
Undifferentiated	Hinduism	158.000	6.621
	Christianity	167.000	4.249
	Jainism	162.000	7.835
Androgynous	Hinduism	173.762	3.823
	Christianity	161.750	5.057
	Jainism	183.133	4.523
Masculine	Hinduism	163.750	8.759
	Christianity	158.833	7.152
	Jainism	185.333	10.114
Feminine	Hinduism	166.385	4.859
	Christianity	171.522	3.653
	Jainism	170.214	4.682

Post Hoc Tests
Type of Religion

Multiple Comparisons

Dependent Variable: Self-Actualization
LSD

(I) Type of Religion	(J) Type of Religion	Mean Difference (I-J)	Std. Error	Sig.
Hinduism	Christianity	1.43	3.480	.682
	Jainism	-7.28	3.888	.063
Christianity	Hinduism	-1.43	3.480	.682
	Jainism	-8.71(*)	3.686	.020
Jainism	Hinduism	7.28	3.888	.063
	Christianity	8.71(*)	3.686	.020

Based on observed means.
* The mean difference is significant at the .05 level.

Univariate Analysis of Variance: Output: 16, Hypothesis: 22 (extra.1)

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	24
	1	Androgynous	41
	2	Masculine	13
	3	Feminine	45
Type of Religion	1	Hinduism	33
	2	Christianity	55
	3	Jainism	35
Years of Experience	0	20 & less than 20	66
	1	more than 20	57

Tests of Between-Subjects Effects

Dependent Variable: Self-Actualization

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	7584.231(a)	22	344.738	1.110	.350
Intercept	1845373.557	1	1845373.557	5941.388	.000
sro	1351.160	3	450.387	1.450	.233
religiontype	747.084	2	373.542	1.203	.305
years	4.793	1	4.793	.015	.901
sro * religiontype	3555.489	6	592.582	1.908	.087
sro * years	51.953	3	17.318	.056	.983
religiontype * years	68.991	2	34.496	.111	.895
sro * religiontype * years	491.580	5	98.316	.317	.902
Error	31059.639	100	310.596		
Total	3636655.000	123			
Corrected Total	38643.870	122			

a R Squared = .196 (Adjusted R Squared = .019)

Estimated Marginal Means

Sex-role Orientation

Dependent Variable: Self-Actualization

Sex-role Orientation	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Undifferentiated	162.343(a)	4.922	152.578	172.109
Androgynous	174.803	2.894	169.062	180.544
Masculine	167.417	5.495	156.514	178.319
Feminine	170.742	3.188	164.417	177.066

a Based on modified population marginal mean.

Type of Religion

Dependent Variable: Self-Actualization

Type of Religion	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Hinduism	169.452(a)	3.962	161.592	177.312
Christianity	165.143	2.874	159.441	170.844
Jainism	172.773	4.074	164.689	180.856

a Based on modified population marginal mean.

Years of Experience

Dependent Variable: Self-Actualization

Years of Experience	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
20 & less than 20	168.978	2.716	163.590	174.365
more than 20	169.250(a)	3.275	162.752	175.749

a Based on modified population marginal mean.

Post Hoc Tests
Type of Religion

Multiple Comparisons

Dependent Variable: Self-Actualization
LSD

(I) Type of Religion	(J) Type of Religion	Mean Difference (I-J)	Std. Error	Sig.
Hinduism	Christianity	6.98	3.881	.075
	Jainism	-1.39	4.276	.747
Christianity	Hinduism	-6.98	3.881	.075
	Jainism	-8.36(*)	3.811	.031
Jainism	Hinduism	1.39	4.276	.747
	Christianity	8.36(*)	3.811	.031

Based on observed means.
* The mean difference is significant at the .05 level.

Sex-role Orientation * Type of Religion

Dependent Variable: Self-Actualization

Sex-role Orientation	Type of Religion	Mean	Std. Error
Undifferentiated	Hinduism	169.800(a)	7.882
	Christianity	166.792	5.688
	Jainism	154.167	10.175
Androgynous	Hinduism	178.550	4.826
	Christianity	163.054	5.523
	Jainism	182.806	4.644
Masculine	Hinduism	159.167	10.175
	Christianity	158.833	7.195
	Jainism	184.250	10.792
Feminine	Hinduism	170.464	7.065
	Christianity	171.892	4.184
	Jainism	169.869	4.902

a Based on modified population marginal mean.

Oneway Anova: Output: 16, Hypothesis: 22 (extra. 2)

Descriptives

Self-Actualization

		Hinduism	Christianity	Jainism	Total
N		46	58	37	141
Mean		168.46	166.86	175.57	169.67
Std. Deviation		20.277	16.057	17.724	18.189
Std. Error		2.990	2.108	2.914	1.532
95% Confidence Interval for Mean	Lower Bound	162.44	162.64	169.66	166.64
	Upper Bound	174.48	171.08	181.48	172.70
Minimum		109	136	144	109
Maximum		205	197	214	214

ANOVA

Self-Actualization

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1811.943	2	905.971	2.809	.064
Within Groups	44507.391	138	322.517		
Total	46319.333	140			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Self-Actualization

LSD

(I) Type of Religion	(J) Type of Religion	Mean Difference (I-J)	Std. Error	Sig.
Hinduism	Christianity	1.594	3.546	.654
	Jainism	-7.111	3.966	.075
Christianity	Hinduism	-1.594	3.546	.654
	Jainism	-8.705(*)	3.779	.023
Jainism	Hinduism	7.111	3.966	.075
	Christianity	8.705(*)	3.779	.023

* The mean difference is significant at the .05 level.

Sex-role Orientation * Type of Religion

Dependent Variable: Self-Actualization

Sex-role Orientation	Type of Religion	Mean	Std. Error
Undifferentiated	Hinduism	169.800(a)	7.882
	Christianity	166.792	5.688
	Jainism	154.167	10.175
Androgynous	Hinduism	178.550	4.826
	Christianity	163.054	5.523
	Jainism	182.806	4.644
Masculine	Hinduism	159.167	10.175
	Christianity	158.833	7.195
	Jainism	184.250	10.792
Feminine	Hinduism	170.464	7.065
	Christianity	171.892	4.184
	Jainism	169.869	4.902

a Based on modified population marginal mean.

Cross tabs: Output: 16, Hypothesis: 22 (extra.3)

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Type of Religion * Education	268	35.6%	484	64.4%	752	100.0%

Type of Religion * Education Cross tabulation

Type of Religion			Education				Total
			Under graduate	Graduate	Double & Post Graduate	More than PG	
	Buddhism	Count	5	28	30	3	66
		% within Type of Religion	7.6%	42.4%	45.5%	4.5%	100.0%
		% within Education	8.8%	28.3%	38.5%	8.8%	24.6%
		% of Total	1.9%	10.4%	11.2%	1.1%	24.6%
	Hinduism	Count	20	37	27	18	102
		% within Type of Religion	19.6%	36.3%	26.5%	17.6%	100.0%
		% within Education	35.1%	37.4%	34.6%	52.9%	38.1%
		% of Total	7.5%	13.8%	10.1%	6.7%	38.1%
	Christianity	Count	1	29	15	12	57
		% within Type of Religion	1.8%	50.9%	26.3%	21.1%	100.0%
		% within Education	1.8%	29.3%	19.2%	35.3%	21.3%
		% of Total	.4%	10.8%	5.6%	4.5%	21.3%
	Jainism	Count	31	5	6	1	43
		% within Type of Religion	72.1%	11.6%	14.0%	2.3%	100.0%
		% within Education	54.4%	5.1%	7.7%	2.9%	16.0%
		% of Total	11.6%	1.9%	2.2%	.4%	16.0%
Total		Count	57	99	78	34	268
		% within Type of Religion	21.3%	36.9%	29.1%	12.7%	100.0%
		% within Education	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	21.3%	36.9%	29.1%	12.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	101.444(a)	9	.000
Likelihood Ratio	94.801	9	.000
Linear-by-Linear Association	16.897	1	.000
N of Valid Cases	268		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.46.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.524			.000
Interval by Interval	Pearson's R	-.252	.057	-4.239	.000(c)
Ordinal by Ordinal	Spearman Correlation	-.232	.060	-3.890	.000(c)
N of Valid Cases		268			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Hypothesis – 22:

The null hypothesis that there are no significant differences in the SEA of saints with different religions is accepted here. (Output. 16, Hypothesis: 22). Thus, Type of Religion had no significant effect on SEA in general. However, LSD differences for multiple comparisons (Output. 16) suggest that Christianity scored significantly lower on SEA as compared to Hinduism. Though Jainism also yielded higher SEA – scores than Christianity, the difference

between Jainism and Christianity was not significant. However, as deeper analysis (Output. 16, Hypothesis: 22 (extra)) suggested, like Hinduism, Jainism also scored significantly higher on SEA than Christianity, if educational effect is bracketed. If education is neglected then only Jainism remains significantly higher on SEA than Christianity and not Hinduism too. This means that Hinduism has significantly higher SEA when education is taken into account.

However, we have seen that Christianity had significantly higher proportion of saints in almost all the educational categories, other than under graduates, than Hinduism. (Output. 16, Hypothesis: 22 (Extra.3)) So Hinduism's higher SEA than Christianity cannot be attributed to education too. Therefore, it is possible that higher SEA of Hinduism might be due to SRO, but if we remove SRO and perform only one-way ANOVA of Type of Religion on SEA (Output. 16, Hypothesis: 22 (extra.2)), then also we find that Hinduism did not show higher SEA than Christianity significantly. Only when SRO, Type of Religion, and Education are taken as three main factors, then only Hinduism yields significantly higher SEA.

Overall we can say that, Christianity had significantly low SEA – scores than the two Eastern religions. The difference between the two Eastern religions on SEA was non – significant. The only explanation of this significantly lower SEA score of Christianity like Mental Health too, could only be the cultural differences, as discussed earlier. Though any religion, by itself, is principally thought to be beyond any geographic conditions, it is only the Western versus Eastern aspect of religion, which could be attributed for significant differences in SEA of Western Christianity and the SEA of two

Eastern religions. Science and technology are the characteristics of Western cultures with preponderance of reason or rationality, while Eastern religious culture may loosely be called to be less rationalistic and more intuitive in its outlook, and this intuitive preponderance of Eastern religions might be more conducive for self – actualization.

Ravinder Shashi (1987) had found that Androgyny was more predominantly found in traditional cultures like that of India than that of Western culture of Australia. Higher Androgyny implies higher SEA as Androgyny is significantly correlated with SEA. Thus studies on cultural differences in Androgyny indirectly explain higher SEA of Hinduism.

In short, barring the least significant differences between the SEA scores of Christian saints and the SEA scores of the saints of other two religion, over all Type of Religion, has neither as a main factor nor in interaction with any other factors, (except when taken with SRO), is found to have any significant effect upon the SEA of saints in ANOVA results. When SRO and Type of Religion are taken as main factors, we find that type of religion has significant effect upon SEA and its interaction with Sex-Role Orientation is also found to have significant effect on self – actualization at .06 level. (Output. 16, Hypothesis: 22 (extra). As the results suggest, the Androgynous, and the Masculine SRO had maximum scoring of SEA in Jainism as compared to other religions. Feminine and Undifferentiated SRO had maximum scoring of SEA in Christianity than other religions. In this way, Type of Religion significantly interacts with Sex-Role Orientation to have significant effect on self – actualization.

Univariate Analysis of Variance: Output: 17, Hypothesis: 23

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	20
	1	Androgynous	75
	2	Masculine	28
	3	Feminine	38
Type of Art	0	Dance & Drama	49
	1	Music	56
	2	Painting	56
Education	0	Under graduate	29
	1	Graduate	70
	2	Double & Post Graduate	46
	3	More than PG	16

Tests of Between-Subjects Effects

Dependent Variable: Self-Actualization

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	15854.006(a)	41	386.683	1.517	.043
Intercept	1975227.876	1	1975227.876	7749.364	.000
Sro	4333.798	3	1444.599	5.668	.001
arttype	959.886	2	479.943	1.883	.157
educat	1492.284	3	497.428	1.952	.125
sro * arttype	3366.850	6	561.142	2.202	.047
sro * educat	2376.505	9	264.056	1.036	.416
arttype * educat	1642.957	6	273.826	1.074	.382
sro * arttype * educat	2938.184	12	244.849	.961	.490
Error	30331.795	119	254.889		
Total	5230595.000	161			
Corrected Total	46185.801	160			

a R Squared = .343 (Adjusted R Squared = .117)

Estimated Marginal Means

Sex-role Orientation

Dependent Variable: Self-Actualization

Sex-role Orientation	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Undifferenciated	167.208(a)	4.194	158.904	175.513
Androgynous	185.848	2.570	180.759	190.938
Masculine	180.735(a)	3.388	174.026	187.444
Feminine	175.655(a)	3.355	169.011	182.298

a Based on modified population marginal mean.

Type of Art

Dependent Variable: Self-Actualization

Type of Art	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Dance & Drama	174.875 (a)	3.285	168.371	181.380
Music	177.089	2.457	172.224	181.955
Painting	182.586 (a)	2.970	176.705	188.467

a Based on modified population marginal mean.

Sex-role Orientation * Type of Art

Dependent Variable: Self-Actualization

Sex-role Orientation	Type of Art	Mean	Std. Error
Undifferentiated	Dance & Drama	120.000(a)	15.965
	Music	172.667	5.153
	Painting	175.667(a)	7.040
Androgynous	Dance & Drama	180.759	4.366
	Music	188.649	4.222
	Painting	188.138	4.751
Masculine	Dance & Drama	179.111(a)	6.590
	Music	174.542	5.404
	Painting	188.146	5.761
Feminine	Dance & Drama	179.533	6.140
	Music	172.500	4.797
	Painting	174.689(a)	6.590

a Based on modified population marginal mean.

Post Hoc Tests
Sex-role Orientation

Multiple Comparisons

Dependent Variable: Self-Actualization
LSD

(I) Sex-role Orientation	(J) Sex-role Orientation	Mean Difference (I-J)	Std. Error	Sig.
Undifferentiated	Androgynous	-14.49(*)	4.018	.000
	Masculine	-10.71(*)	4.674	.024
	Feminine	-7.76	4.410	.081
Androgynous	Undifferentiated	14.49(*)	4.018	.000
	Masculine	3.78	3.536	.287
	Feminine	6.73(*)	3.179	.036
Masculine	Undifferentiated	10.71(*)	4.674	.024
	Androgynous	-3.78	3.536	.287
	Feminine	2.95	3.976	.459
Feminine	Undifferentiated	7.76	4.410	.081
	Androgynous	-6.73(*)	3.179	.036
	Masculine	-2.95	3.976	.459

Based on observed means.
* The mean difference is significant at the .05 level.

Type of Art

Multiple Comparisons

Dependent Variable: Self-Actualization
LSD

(I) Type of Art	(J) Type of Art	Mean Difference (I-J)	Std. Error	Sig.
Dance & Drama	Music	-1.51	3.123	.630
	Painting	-5.35	3.123	.089
Music	Dance & Drama	1.51	3.123	.630
	Painting	-3.84	3.017	.206
Painting	Dance & Drama	5.35	3.123	.089
	Music	3.84	3.017	.206

Based on observed means.

Univariate Analysis of Variance: Output: 17, Hypothesis: 23 (extra)

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	21
	1	Androgynous	77
	2	Masculine	30
	3	Feminine	40
Type of Art	0	Dance & Drama	50
	1	Music	59
	2	Painting	59

Tests of Between-Subjects Effects

Dependent Variable: Self-Actualization

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9205.181(a)	11	836.835	3.216	.001
Intercept	2291030.224	1	2291030.224	8805.837	.000
sro	6708.769	3	2236.256	8.595	.000
arttype	2432.738	2	1216.369	4.675	.011
sro * arttype	3534.657	6	589.109	2.264	.040
Error	40586.795	156	260.172		
Total	5431964.000	168			
Corrected Total	49791.976	167			

a R Squared = .185 (Adjusted R Squared = .127)

Estimated Marginal Means

Sex-role Orientation * Type of Art

Dependent Variable: Self-Actualization

Sex-role Orientation	Type of Art	Mean	Std. Error
Undifferentiated	Dance & Drama	120.000	16.130
	Music	167.923	4.474
	Painting	172.857	6.097
Androgynous	Dance & Drama	178.704	3.104
	Music	186.368	3.700
	Painting	186.194	2.897
Masculine	Dance & Drama	176.222	5.377
	Music	172.900	5.101
	Painting	184.545	4.863
Feminine	Dance & Drama	179.231	4.474
	Music	177.529	3.912
	Painting	172.600	5.101

Univariate Analysis of Variance: Output: 17, Hypothesis: 23 (extra.1)

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	19
	1	Androgynous	70
	2	Masculine	26
	3	Feminine	37
Type of Art	0	Dance & Drama	48
	1	Music	48
	2	Painting	56
Years of Experience	0	20 & less than 20	68
	1	more than 20	84

Tests of Between-Subjects Effects

Dependent Variable: Self-Actualization

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11521.492(a)	22	523.704	1.938	.012
Intercept	2548222.370	1	2548222.370	9431.032	.000
sro	7258.537	3	2419.512	8.955	.000
arttype	1762.999	2	881.500	3.262	.041
years	42.654	1	42.654	.158	.692
sro * arttype	2266.159	6	377.693	1.398	.220
sro * years	620.802	3	206.934	.766	.515
arttype * years	123.853	2	61.927	.229	.795
sro * arttype * years	608.970	5	121.794	.451	.812
Error	34855.219	129	270.195		
Total	4921622.000	152			
Corrected Total	46376.711	151			

a R Squared = .248 (Adjusted R Squared = .120)

Estimated Marginal Means

Sex-role Orientation

Dependent Variable: Self-Actualization

Sex-role Orientation	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Undifferentiated	158.227(a)	4.726	148.876	167.577
Androgynous	185.020	2.177	180.711	189.328
Masculine	179.022	3.429	172.238	185.807
Feminine	177.260	2.898	171.526	182.993

a Based on modified population marginal mean.

Type of Art

Dependent Variable: Self-Actualization

Type of Art	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Dance & Drama	169.738(a)	3.277	163.254	176.222
Music	177.223	2.718	171.845	182.601
Painting	179.124	2.668	173.845	184.403

a Based on modified population marginal mean.

Years of Experience

Dependent Variable: Self-Actualization

Years of Experience	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
20 & less than 20	174.206	2.628	169.006	179.405
more than 20	177.134(a)	1.950	173.276	180.992

a Based on modified population marginal mean.

Post Hoc Tests
Type of Art

Multiple Comparisons

Dependent Variable: Self-Actualization
LSD

(I) Type of Art	(J) Type of Art	Mean Difference (I-J)	Std. Error	Sig.
Dance & Drama	Music	-.98	3.355	.771
	Painting	-4.84	3.233	.137
Music	Dance & Drama	.98	3.355	.771
	Painting	-3.86	3.233	.235
Painting	Dance & Drama	4.84	3.233	.137
	Music	3.86	3.233	.235

Based on observed means.

Oneway Anova: Output: 17 Hypothesis: 23 (extra.2)

Descriptives

Self-Actualization

		Dance & Drama	Music	Painting	Total
N		50	60	60	170
Mean		177.22	177.80	181.57	178.96
Std. Deviation		17.252	17.727	16.915	17.311
Std. Error		2.440	2.288	2.184	1.328
95% Confidence Interval for Mean	Lower Bound	172.32	173.22	177.20	176.34
	Upper Bound	182.12	182.38	185.94	181.58
Minimum		120	118	138	118
Maximum		219	215	225	225

ANOVA

Self-Actualization

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	639.798	2	319.899	1.068	.346
Within Groups	50004.913	167	299.431		
Total	50644.712	169			

Post Hoc Tests

Type of Art

Multiple Comparisons

Dependent Variable: Self-Actualization
LSD

(I) Type of Art	(J) Type of Art	Mean Difference (I-J)	Std. Error	Sig.
Dance & Drama	Music	-.580	3.313	.861
	Painting	-4.347	3.313	.191
Music	Dance & Drama	.580	3.313	.861
	Painting	-3.767	3.159	.235
Painting	Dance & Drama	4.347	3.313	.191
	Music	3.767	3.159	.235

Hypothesis - 23:

The null hypothesis that there are no significant differences in the self- actualization of artists with respect to the Type of Art they worshipped is accepted (Output. 17, Hypothesis: 23). This means that Type of Art had no significant effect on self – actualization. The artists, with different types of art do not differ significantly in their self-actualization. However, as the type of person analysis had shown,

(Output. 15 Hypothesis: 20), artists were significantly more self – actualized than the normals and the saints. Thus, though worship of art does facilitate self – actualization, the Type of Art being worshipped is not significant. Thus, whichever may be the art worshipped, be it dance/drama, painting / sculpture or music- it has no significant effect on the self – actualization of artists. Type of Art had no significant effect on SEA as a main effect or in interaction with education or years of experience.

However, when education and years of experience are neglected and only SRO and Type of Art are analyzed, then we find its significant effect on SEA as main factor and also in interaction with SRO, the Type of Art is found to have significant effect on SEA. (Output. 17, Hypothesis: 23 (extra)) Like Type of Religion, the Type of Art also affects the self – actualization of artist in interaction with artists' SRO. As the results show, the androgynous artists scored maximum on SEA in music. The Masculine artists had maximum SEA – scores in painting/sculpture. The Feminine artists had maximum SEA scores in dance/drama. The Undifferentiated had maximum SEA scores in painting/sculpture. Thus, saints and artists both had significant difference in their self – actualization with respect to Type of Religion or Type of Art, when analyzed with reference to SRO.

Thus, SRO or Androgyny most significantly affects the personality variables like MH, EC, and SEA too. Other Independent variables like TR and TA are also found to be effective when they interact with SRO.

It is important to note here that Type of Art is found to have non-significant effect on SEA when it is analyzed as one of the three

main factors like SRO, TA and Education (Output. 17 Hypothesis: 22) However, when educational effect is bracketed and two way ANOVA is performed for SRO and TA, then TA is found to have significant effect SEA (Output. 17, Hypothesis: 23 extra).

Similarly, TA is found to have significant effect on SEA when education has been substituted by years of experience (Output. 17, Hypothesis: 23 (extra.1)). One-way ANOVA also does not show significant effect of TA on SEA. (Output. 17, Hypothesis: 23 (Extra.2) Thus, the results obtained for the effect of Type of Religion on saints' self-actualization are the same as the results obtained for the effect of Type of Art on artists' self- actualization.

However, fundamental difference between the two was that LSD results had consistently reinforced the significantly lower SEA scores of Christianity, compared to other religions, while in case of Type of Art, none of the least significant differences among various arts were found to be significant. Thus, though mean differences suggest that SEA – scores increase with painting/sculpture, music and dance/drama successively, the non-significant LSDs does not establish any hierarchy in Type of Art with respect to SEA. This being so, we can conclude that though Type of Art has significant effect on SEA, it is not so significant to create significant LSDs.

Univariate Analysis of Variance: Output: 18, Hypothesis: 24

Between-Subjects Factors

		Value Label	N
Type of Religion	1	Hinduism	33
	2	Christianity	55
	3	Jainism	35
Years of Experience	0	20 & less than 20	66
	1	more than 20	57

Tests of Between-Subjects Effects

Dependent Variable: Self-Actualization

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2111.142(a)	5	422.228	1.352	.247
Intercept	3210723.460	1	3210723.460	10282.688	.000
religiontype	1801.751	2	900.875	2.885	.060
years	97.152	1	97.152	.311	.578
religiontype * years	179.643	2	89.821	.288	.751
Error	36532.728	117	312.246		
Total	3636655.000	123			
Corrected Total	38643.870	122			

a R Squared = .055 (Adjusted R Squared = .014)

Estimated Marginal Means

Type of Religion

Dependent Variable: Self-Actualization

Type of Religion	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Hinduism	173.628	3.347	167.000	180.256
Christianity	166.747	2.393	162.008	171.485
Jainism	175.222	2.988	169.304	181.140

Years of Experience

Dependent Variable: Self-Actualization

Years of Experience	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
20 & less than 20	170.920	2.196	166.571	175.270
more than 20	172.811	2.582	167.698	177.925

Post Hoc Tests
Type of Religion

Multiple Comparisons

Dependent Variable: Self-Actualization
LSD

(I) Type of Religion	(J) Type of Religion	Mean Difference (I-J)	Std. Error	Sig.
Hinduism	Christianity	6.98	3.891	.076
	Jainism	-1.39	4.288	.747
Christianity	Hinduism	-6.98	3.891	.076
	Jainism	-8.36(*)	3.821	.031
Jainism	Hinduism	1.39	4.288	.747
	Christianity	8.36(*)	3.821	.031

Based on observed means.
* The mean difference is significant at the .05 level.

Hypothesis - 24:

The null hypothesis that saints do not differ significantly in their self – actualization with different years of renunciation is accepted (Output. 18, Hypothesis: 24). As the mean differences suggests, saints with renunciation of more than 20 years had though higher mean score of self – actualization than the saints with renunciation of 20 or less than 20 years; this differences was not statistically significant.

Univariate Analysis of Variance: Output: 19, Hypothesis: 25

Between-Subjects Factors

		Value Label	N
Type of Art	0	Dance & Drama	48
	1	Music	49
	2	Painting	57
Years of Experience	0	20 & less than 20	69
	1	more than 20	85

Tests of Between-Subjects Effects

Dependent Variable: Self-Actualization

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	742.017(a)	5	148.403	.472	.796
Intercept	4661514.687	1	4661514.687	14840.333	.000
arttype	569.723	2	284.861	.907	.406
years	10.132	1	10.132	.032	.858
arttype * years	184.117	2	92.059	.293	.746
Error	46488.457	148	314.111		
Total	4984767.000	154			
Corrected Total	47230.474	153			

a R Squared = .016 (Adjusted R Squared = -.018)

Univariate Analysis of Variance: Output: 20 Hypothesis: 26

Between-Subjects Factors

		Value Label	N
Age	0	1-25	168
	1	26-50	141
	2	51-90	56

Tests of Between-Subjects Effects

Dependent Variable: Self-Actualization

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	482.403(a)	2	241.202	.775	.461
Intercept	9003218.718	1	9003218.718	28943.120	.000
age	482.403	2	241.202	.775	.461
Error	112605.871	362	311.066		
Total	11324488.000	365			
Corrected Total	113088.274	364			

a R Squared = .004 (Adjusted R Squared = -.001)

T-Test Output: 21, Hypothesis: 27

Group Statistics

	Self-Actualization	
	Gender	
	Male	Female
N	205	238
Mean	174.57	172.95
Std. Deviation	17.014	18.966
Std. Error Mean	1.188	1.229

Independent Samples Test

			Self-Actualization	
			Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F		2.530	
	Sig.		.112	
t-test for Equality of Means	t		.935	.943
	df		441	440.261
	Sig. (2-tailed)		.350	.346
	Mean Difference		1.612	1.612
	Std. Error Difference		1.724	1.710
	95% Confidence Interval of the Difference	Lower	-1.776	-1.748
		Upper	5.000	4.972

Hypothesis – 25:

Similarly, the null hypothesis that artists do not differ significantly in their self-actualization with different years of experience is accepted. (Output. 19; Hypothesis: 25). Thus, years of experience in the field of art had no significant effect on the self – actualization of artists.

Hypothesis - 26 & 27:

The null hypotheses about the effects of Age and Gender on self – actualization are both accepted (Output. 20-21, Hypotheses: 26-27). There are no age differences or gender differences in self – actualization.

Schindler and Waters (1986) Endo K. and Hasimoto T. (1998) had found females to be more Self-Actualized than males. While here no significant gender differences were found for SEA.

Plouffe & Gravelle examined some correlates of SEA among 80 older adults. Significant effect of Age on SEA was found, with the older Ss having lower score on POI than younger Ss, contradicting again Maslow's hypothesis that Self-actualization may increase with age. Sex had no significant effect on SEA. Thus present research substantiates Plouffe and Gravell's finding about the no effect of Gender on SEA. But does not support age effect on SEA.

Hawkins, Hawkins and Ray (1989) studies 290 faculty members (aged 30-68 yrs) who completed POI to examine age – related trends for Self – actualization. Polynomial regression analysis – yielded no trends for Self-actualization and age, as also found in present research. Thus present research supports Hawkins et al. finding, but it also contradicts A.H. Maslow's hypothesis that age is directly related to Self – actualization.

Kumari and Mathur (1989) investigated Self-Actualization as a function of age in 200 industrial supervisors and engineers (aged 25 - 60 yrs), using POI. Three dimensions of Self- actualization (Time competence, Inner-directedness and Self -actualizing Values) were found to be correlated with Ss' age. Mediational Correlational Analysis indicated that Age was related to L. V. Gordon's bureaucratic organization dimension of Self -actualization as well as to Ss' belief systems, while in present study no age effect on SEA was found.

To summarize the SEA analysis of present research, we can say that neither age nor gender nor even formal education up to graduation had significant effects on self – actualization. Years of renunciation also had no significant effect on the self – actualization of saints. Similarly, years of experience in the field of particular art also had no significant effect on artists' self – actualization. This shows that no external or quantitative measures like age, gender, years of experience etc. had any significant effects on self-actualization. Among the eight Independent variable; age, gender, education and years of experience these four had no significant effect on SEA. SRO and TP are found to have significant effects on SEA. TR and TA are also found to be effective in their interaction with SRO or when analyzed as one of the two factors with SRO. Thus, overall SRO, and among all the four Sex-Role Orientation also, Androgyny is found to be most effective for self – actualization. The correlational analysis to be discussed latter, also reinforces this positive correlation of Androgyny on Self- actualization.

4. LOC and Internal LOC Analysis:

On the basis of the scores obtained on Rotter's locus of control scale, the subject was categorized as 'external' or as 'internal'. 'Internal' categorization of subject on LOC scale suggests the attribution of causality within one's own self, while the subject with 'external' categorization on LOC scale suggests the attribution of causality in external variables, other than one's own self. In other words, Internal locus of control refers to individuals who believe that the reinforcements are contingent upon their own behavior, capacities

or attributes; while external locus of control refers to individuals who believe that reinforcements are not under one's control, but they are, rather, under the control of powerful others like luck, chances etc.

As the LOC frequencies results (Output. 28.1) suggest, out of total 430 responses on LOC – scale, 358 Ss, i.e. 83.3% Ss were 'Internals', while 72 SS, i.e. 16.7% Ss were 'Externals'. Thus, there was very big and significant difference (Output. 21.1) between the frequencies of internals and externals within the sample of 430 Ss. A great number of internals in population suggests that in modern age, with democratic and open society, with expanding scientific and rationalistic outlook, people in general be saints, artists or normals- are having tendency to root the causality of rewards and/or punishments, which life yields, within one's own self, rather than in the external factors like chance, fate or even God. As the results show, even among saints also, 86.8% of the Ss are found to be internals and only 13.2% of the saints were externals. (Output. 22, Hypothesis: 30). Thus, because majority of the subjects studied in present research were found to be 'internal' controls, here further analysis was made with respect to the differences in the amount of internality of locus of control for all the Independent variables, namely, Sex-Role Orientation (SRO), Type of Person (TP), Type of Religion (TR), Type of art (TA), Education, Age, Gender and Years of Experience. In this section of results and discussion, all these eight variables were analyzed with reference to LOC category (Internal / External) and also with Internality of Locus of Control.

Chi-Square Test: Output: 28.1
Frequencies

Locus of Control category

	Observed N	Expected N	Residual
External	72	215.0	-143.0
Internal	358	215.0	143.0
Total	430		

Test Statistics

	Locus of Control category
Chi-Square (a)	190.223
df	1
Asymp. Sig.	.000

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 215.0.

Cross tabs: Output: 22, Hypothesis: 28

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Locus of Control category * Sex-role Orientation	428	56.9%	324	43.1%	752	100.0%

Locus of Control category * Sex-role Orientation Cross tabulation

			Sex-role Orientation				Total
			Undifferentiated	**Androgynous**	**Masculine**	**Feminine**	
LOC Category	External	Count	13	26	6	26	71
		% within Locus of Control category	18.3%	36.6%	8.5%	36.6%	100.0%
		% within Sex-role Orientation	17.1%	15.0%	11.5%	20.5%	16.6%
		% of Total	3.0%	6.1%	1.4%	6.1%	16.6%
	Internal	Count	63	147	46	101	357
		% within Locus of Control category	17.6%	41.2%	12.9%	28.3%	100.0%
		% within Sex-role Orientation	82.9%	85.0%	88.5%	79.5%	83.4%
		% of Total	14.7%	34.3%	10.7%	23.6%	83.4%
Total		Count	76	173	52	127	428
		% within Locus of Control category	17.8%	40.4%	12.1%	29.7%	100.0%
		% within Sex-role Orientation	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	17.8%	40.4%	12.1%	29.7%	100.0%

Chi-Square Tests

	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	2.662(a)	3	.447
Likelihood Ratio	2.686	3	.443
Linear-by-Linear Association	.659	1	.417
N of Valid Cases	428		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.63

Symmetric Measures

		Value	**Approx. Sig.**
Nominal by Nominal	Contingency Coefficient	.079	.447
N of Valid Cases		428	

Cross tabs: Output: 22 Hypothesis: 30

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Locus of Control category * Type of Person	430	57.2%	322	42.8%	752	100.0%

Locus of Control category * Type of Person Cross tabulation

			Type of Person			Total
			Normals	Saints	Artists	
Locus of Control category	External	Count	24	18	30	72
		% within Locus of Control category	33.3%	25.0%	41.7%	100.0%
		% within Type of Person	18.8%	13.2%	18.1%	16.7%
		% of Total	5.6%	4.2%	7.0%	16.7%
	Internal	Count	104	118	136	358
		% within Locus of Control category	29.1%	33.0%	38.0%	100.0%
		% within Type of Person	81.3%	86.8%	81.9%	83.3%
		% of Total	24.2%	27.4%	31.6%	83.3%
Total		Count	128	136	166	430
	% within Locus of Control category		29.8%	31.6%	38.6%	100.0%
	% within Type of Person		100.0%	100.0%	100.0%	100.0%
	% of Total		29.8%	31.6%	38.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.781(a)	2	.411
Likelihood Ratio	1.841	2	.398
Linear-by-Linear Association	.003	1	.955
N of Valid Cases	430		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 21.43.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.064	.411
N of Valid Cases		430	

Cross tabs: Output: 22, Hypothesis: 32

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Locus of Control category * Education	387	51.5%	365	48.5%	752	100.0%

Locus of Control category * Education Cross tabulation

			Education				Total
			Under graduate	Graduate	Double & Post Graduate	More than PG	
Locus of Control category	External	Count	7	28	27	6	68
		% within Locus of Control category	10.3%	41.2%	39.7%	8.8%	100.0%
		% within Education	11.3%	20.1%	23.1%	8.7%	17.6%
		% of Total	1.8%	7.2%	7.0%	1.6%	17.6%
	Internal	Count	55	111	90	63	319
		% within Locus of Control category	17.2%	34.8%	28.2%	19.7%	100.0%
		% within Education	88.7%	79.9%	76.9%	91.3%	82.4%
		% of Total	14.2%	28.7%	23.3%	16.3%	82.4%
Total		Count	62	139	117	69	387
	% within Locus of Control category		16.0%	35.9%	30.2%	17.8%	100.0%
	% within Education		100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total		16.0%	35.9%	30.2%	17.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.525(a)	3	.036
Likelihood Ratio	9.217	3	.027
Linear-by-Linear Association	.070	1	.791
N of Valid Cases	387		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.89.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.147	.036
N of Valid Cases		387	

Univariate Analysis of Variance: Output: 22, Hypotheses: 29-31-33

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	68
	1	Androgynous	154
	2	Masculine	49
	3	Feminine	111
Type of Person	0	Normals	125
	1	Saints	102
	2	Artists	155
Education	0	Under graduate	60
	1	Graduate	138
	2	Double & Post Graduate	116
	3	More than PG	68

Tests of Between-Subjects Effects

Dependent Variable: Internal Locus of Control

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	744.960(a)	47	15.850	1.203	.181
Intercept	43385.508	1	43385.508	3292.606	.000
sro	35.240	3	11.747	.891	.446
person	138.577	2	69.288	5.258	.006
educat	13.008	3	4.336	.329	.804
sro * person	29.022	6	4.837	.367	.900
sro * educat	70.520	9	7.836	.595	.801
person * educat	86.848	6	14.475	1.099	.363
sro * person * educat	192.541	18	10.697	.812	.686
Error	4401.000	334	13.177		
Total	86801.000	382			
Corrected Total	5145.961	381			

a R Squared = .145 (Adjusted R Squared = .024)

Estimated Marginal Means

Type of Person

Dependent Variable: Internal Locus of Control

Type of Person	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Normals	14.955	.452	14.066	15.843
Saints	15.859	.503	14.869	16.849
Artists	13.848	.385	13.090	14.605

Education

Dependent Variable: Internal Locus of Control

Education	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Under graduate	14.547	.640	13.288	15.806
Graduate	14.791	.377	14.050	15.532
Double & Post Graduate	14.851	.421	14.023	15.680
More than PG	15.359	.590	14.198	16.519

Post Hoc Tests
Type of Person

Multiple Comparisons

Dependent Variable: Internal Locus of Control
LSD

(I) Type of Person	(J) Type of Person	Mean Difference (I-J)	Std. Error	Sig.
Normals	Saints	-.92	.484	.059
	Artists	.95(*)	.436	.031
Saints	Normals	.92	.484	.059
	Artists	1.86(*)	.463	.000
Artists	Normals	-.95(*)	.436	.031
	Saints	-1.86(*)	.463	.000

Based on observed means.
* The mean difference is significant at the .05 level.

Multiple Comparisons

Dependent Variable: Internal Locus of Control
LSD

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.
Under graduate	Under graduate			
	Graduate	-.56	.561	.318
	Double & Post Graduate	.03	.577	.962
	More than PG	-1.27(*)	.643	.049
Graduate	Under graduate	.56	.561	.318
	Graduate			
	Double & Post Graduate	.59	.457	.199
	More than PG	-.71	.538	.188
Double & Post Graduate	Under graduate	-.03	.577	.962
	Graduate	-.59	.457	.199
	Double & Post Graduate			
	More than PG	-1.30(*)	.554	.020
More than PG	Under graduate	1.27(*)	.643	.049
	Graduate	.71	.538	.188
	Double & Post Graduate	1.30(*)	.554	.020
	More than PG			

Based on observed means.

- The mean difference is significant at the .05 level.

Hypotheses – 28-29:

The null hypothesis that there are no significant differences between the externals and internals with respect to their Sex-Role Orientations is accepted (Output. 22, Hypothesis: 28). The Chi-Square analysis of SRO and LOC categories suggests that there are no significant difference in the frequencies of external and internal controls due to differences is Sex-Role Orientations. Though the Androgynous and the Masculine Sex-Role Orientations are found to have higher proportions of internals than in the Feminine & the Undifferentiated, this difference was not statistically significant. Thus, SRO is not significantly related to LOC categorization. Not only that but further analysis with respect to internality of LOC also suggests that Sex-Role Orientation has no significant effect on the internality of LOC too. (Output. 22, Hypothesis: 29).

In short, SRO had no significant effect on LOC and on internality of LOC. The frequency differences of LOC categories among different SROs were too small to be significant. Similarly the mean differences on the internal LOC among different SROs were also too less to be significant. Hence, the null hypothesis that there are no significant differences in the in the internality of LOC of subjects with different Sex-Role Orientations is accepted (Output. 22, Hypothesis: 29).

Hypotheses- 30-31*:*

The null hypothesis that saints, artists, and normals do not differ significantly with respect to LOC category is accepted here.

(Output. 22, Hypothesis: 30). As majority of the Ss are found to be internals in all the three types of person i.e., in saints, artists and normals, we find that there are no significant differences in the LOC categorization as external or internal due to type of person.

However, deeper analysis about the amount of internality of LOC among different types of person, suggests that type of person does have significant effect on internality of LOC. (Output. 22, Hypothesis: 31) As the mean differences suggest, contrary to commonsense view, saints were found to score maximum on the internality of locus of control, than the normals and the artists. Commonsense would predict that religious persons would attribute causality more to fate or to God, and so they would score more on Externality of LOC. But the results of present research suggest that saints had higher mean score on internality of locus of control than the artists and normals. The mean difference between saints and artists on internality of locus of control was statistically significant but the mean difference between saints and normals on internality of locus of control was non-significant.

Secondly, internal LOC implies a number of positive personality traits like optimism, faith in positive concept of man, acceptance of human freedom and responsibility, power of self assertion and self – determination etc. Saints, irrespective of the Type of Religion they follow, believe in general in immense human potentials to build and guide their own future. This implicit conviction of saints about human nature might have led them to believe that reinforcements are contingent upon one's own capacities and attributes, rather than on

fate or chance, and this in turn might have led saints to score significantly higher on internality of LOC.

Similarly, normals score significantly higher on internality of LOC than artists. Artists scored less than the saints and the normals on internality of locus of control. Here we must remember that saints, artists and normals all the three types of person are internals only, the difference among them is only in the amount of internality. Artists are, though internals only, their amount of internality is significantly lower than normals and saints.

In short, the null hypothesis that saints, artists, and normals do not differ significantly on the internality of LOC is rejected here (Output. 22, Hypothesis: 31)

Hypotheses - 32-33:

The null hypothesis about the association of education with locus of control is rejected (Output. 22, Hypothesis: 32) and with internality of LOC is accepted. (Output. 22, Hypothesis: 33). That is, Ss with different educational levels differ significantly in their locus of control. (Output. 22, Hypothesis: 32). If analyzed within locus of control category, we find that graduates (41.2%) and postgraduates (39.7%) had significantly higher frequencies of externals, compared to undergraduates (10.3%) and Ss with more than PG education (8.8%); while undergraduates (88.7%) and Ss with education more PG (91.3%) showed significantly higher frequencies of Internals than graduates (79.9%) and postgraduates (76.9%) if analyzed within each educational category. The highest amount of internals (91.3%)

is found in education with more than PG. The under graduates also had 88.7% internals. The reasons might be as discussed earlier, that here many of saints and artists might be formally under graduate but in their own scriptural studies or in their field of art, they might have educated themselves informally at higher level. So, in general, highest education of more than PG has shown highest amount of internals if compared the amount of internals within each educational level separately. LSD results suggest that Ss with more than PG education had significantly higher internality of LOC than UG and double/postgraduate. (Output. 22, Hypothesis: 33) This means that highest education of more than PG develops that mental state where a person leads to see the reinforcements as more contingent upon one's capacity.

Thus, chi-square results show significant role of education in creating the difference of internal and external locus of control but as the ANOVA results show, education had no significant effect on the amount of internality of LOC though LSD did suggest significantly higher internality of locus of control in Ss with more than PG education.

Cross tabs: Output: 23 Hypothesis: 34

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Locus of Control category * Type of Religion	136	18.1%	616	81.9%	752	100.0%

Locus of Control category * Type of Religion Cross tabulation

			Type of Religion			Total
			Hinduism	Christianity	Jainism	
Locus of Control category	External	Count	5	7	6	18
		% within Locus of Control category	27.8%	38.9%	33.3%	100.0%
		% within Type of Religion	10.6%	12.5%	18.2%	13.2%
		% of Total	3.7%	5.1%	4.4%	13.2%
	Internal	Count	42	49	27	118
		% within Locus of Control category	35.6%	41.5%	22.9%	100.0%
		% within Type of Religion	89.4%	87.5%	81.8%	86.8%
		% of Total	30.9%	36.0%	19.9%	86.8%
Total		Count	47	56	33	136
	% within Locus of Control category		34.6%	41.2%	24.3%	100.0%
	% within Type of Religion		100.0%	100.0%	100.0%	100.0%
	% of Total		34.6%	41.2%	24.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.006(a)	2	.605
Likelihood Ratio	.960	2	.619
Linear-by-Linear Association	.896	1	.344
N of Valid Cases	136		

a 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.37.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.086	.605
N of Valid Cases		136	

Univariate Analysis of Variance: Output: 23 Hypothesis: 35

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	20
	1	Androgynous	33
	2	Masculine	10
	3	Feminine	39
Type of Religion	1	Hinduism	30
	2	Christianity	55
	3	Jainism	17
Education	0	Under graduate	20
	1	Graduate	37
	2	Double & Post Graduate	29
	3	More than PG	16

Tests of Between-Subjects Effects

Dependent Variable: Internal Locus of Control

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	528.060(a)	31	17.034	1.336	.158
Intercept	8280.287	1	8280.287	649.606	.000
sro	14.833	3	4.944	.388	.762
religiontype	39.348	2	19.674	1.543	.221
educat	95.225	3	31.742	2.490	.067
sro * religiontype	22.966	5	4.593	.360	.874
sro * educat	113.733	8	14.217	1.115	.364
religiontype * educat	120.095	5	24.019	1.884	.108
sro * religiontype * educat	99.379	4	24.845	1.949	.112
Error	892.264	70	12.747		
Total	26487.000	102			
Corrected Total	1420.324	101			

a R Squared = .372 (Adjusted R Squared = .094)

Estimated Marginal Means

Sex-role Orientation

Dependent Variable: Internal Locus of Control

Sex-role Orientation	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Undifferentiated	14.696(a)	1.125	12.452	16.940
Androgynous	15.962(a)	.690	14.586	17.338
Masculine	16.813(a)	1.181	14.458	19.167
Feminine	14.236(a)	.801	12.639	15.833

a Based on modified population marginal mean.

Type of Religion

Dependent Variable: Internal Locus of Control

Type of Religion	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Hinduism	16.083(a)	.781	14.526	17.641
Christianity	15.686(a)	.650	14.390	16.983
Jainism	13.862(a)	1.166	11.535	16.188

a Based on modified population marginal mean.

Education

Dependent Variable: Internal Locus of Control

Education	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Under graduate	15.617(a)	1.038	13.547	17.688
Graduate	13.745(a)	.848	12.054	15.436
Double & Post Graduate	16.220(a)	.792	14.641	17.799
More than PG	16.738(a)	1.121	14.502	18.974

a Based on modified population marginal mean.

Post Hoc Tests
Type of Religion

Multiple Comparisons

Dependent Variable: Internal Locus of Control
LSD

(I) Type of Religion	(J) Type of Religion	Mean Difference (I-J)	Std. Error	Sig.
Hinduism	Christianity	.76	.810	.349
	Jainism	3.07(*)	1.084	.006
Christianity	Hinduism	-.76	.810	.349
	Jainism	2.31(*)	.991	.023
Jainism	Hinduism	-3.07(*)	1.084	.006
	Christianity	-2.31(*)	.991	.023

Based on observed means.
* The mean difference is significant at the .05 level.

Hypothesis - 34-35:

The null hypothesis that there are no significant differences in the locus of control of the saints with different religions is accepted (Output. 23, Hypothesis: 34). Similarly the null hypothesis that Type of Religion has no significant effect on the internality of LOC is also accepted. (Output. 23, Hypothesis: 35). Thus, Type of Religion has significant effect neither on LOC category nor on the Internality of LOC. Though all the three religions-Hinduism, Jainism & Christianity had more than 80% of the Ss as internals, (Output. 22, Hypothesis: 34), there was no significant difference in the amount of Internality of LOC due to the Type of Religion. However, LSD showed significantly lower internality of LOC in Jainism.

The percent analysis of the frequencies of the externals and the internals within each religion suggests that Jainism had maximum proportion (18.2%) of external as compared to Hinduism (10.6%) and Christianity (12.5%), though all the three have more than 80% internals. Hinduism and Jainism are Eastern religions and Christianity is a Western religion. The major cultural difference between East and West lies, in general in the fact of religious versus scientific outlook. The West in general has been characterized with their preponderance of scientific outlook, keeping relatively less room for faith in fate, chance or any external powers beyond man's control. The scientific temper itself is rooted in faith in man's capacity to control nature. This being so, Christianity with the Western background of scientific outlook in general naturally would have greater proportion of internals (41.5%) compared to other religions within LOC category. Within the religion, Hinduism had highest

amount of internals in comparison with Jainism and Christianity. In short, within LOC category Christianity had maximum internals.

Hindu philosophy is classified as Theistic Philosophy (Aastika Darshana), while Jainism and Buddhism are classified as Non-theistic philosophies. (Naastika Darshana). Among these three Eastern religions of Hinduism, Jainism, and Buddhism, especially Jainism is known for its heavy emphasis on 'Theory of Karma' due to which it is called non-theistic philosophy. Because of its belief in 'Theory of Karma', Jainism tends to have relatively more faith in fate rather than on man's control. So, Jainism has less internals (22.9%) and more externals (18.2%) than Hinduism and Christianity in both category-wise and religion-wise analysis. In short, compared to other religions, Jainism had maximum externals and minimum internals, which may be due to their faith in Theory of Karma.

In short, Jainism showed minimum amount of internality in the frequency-wise chi-square analysis of Internals and externals and also in the score-wise ANOVA results of Internality of LOC as LSD suggested. Maximum amount of internals found in Christianity within LOC category supports the finding of Rao & Murthy (1984) who also found Christians to be more internals. However, the higher amount of internals in Christianity within LOC category observed here was statistically non-significant.

Cross tabs: Output: 24, Hypothesis: 36

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Locus of Control category * Type of Art	166	22.1%	586	77.9%	752	100.0%

Locus of Control category * Type of Art Cross tabulation

			Type of Art			Total
			Dance & Drama	Music	Painting	
Locus of Control category	External	Count	14	10	6	30
		% within Locus of Control category	46.7%	33.3%	20.0%	100.0%
		% within Type of Art	27.5%	17.9%	10.2%	18.1%
		% of Total	8.4%	6.0%	3.6%	18.1%
	Internal	Count	37	46	53	136
		% within Locus of Control category	27.2%	33.8%	39.0%	100.0%
		% within Type of Art	72.5%	82.1%	89.8%	81.9%
		% of Total	22.3%	27.7%	31.9%	81.9%
Total		Count	51	56	59	166
	% within Locus of Control category		30.7%	33.7%	35.5%	100.0%
	% within Type of Art		100.0%	100.0%	100.0%	100.0%
	% of Total		30.7%	33.7%	35.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.520(a)	2	.063
Likelihood Ratio	5.571	2	.062
Linear-by-Linear Association	5.464	1	.019
N of Valid Cases	166		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.22.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.179	.063
N of Valid Cases		166	

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.

Univariate Analysis of Variance: Output: 24 Hypothesis: 37

Between-Subjects Factors

		Value Label	N
Sex-role Orientation	0	Undifferentiated	19
	1	Androgynous	72
	2	Masculine	27
	3	Feminine	37
Type of Art	0	Dance & Drama	50
	1	Music	52
	2	Painting	53
Education	0	Under graduate	28
	1	Graduate	67
	2	Double & Post Graduate	45
	3	More than PG	15

Tests of Between-Subjects Effects

Dependent Variable: Internal Locus of Control

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	472.621(a)	41	11.527	.941	.578
Intercept	11360.522	1	11360.522	926.918	.000
sro	12.507	3	4.169	.340	.796
arttype	12.182	2	6.091	.497	.610
educat	18.758	3	6.253	.510	.676
sro * arttype	83.832	6	13.972	1.140	.344
sro * educat	129.082	9	14.342	1.170	.321
arttype * educat	52.728	6	8.788	.717	.637
sro * arttype * educat	201.912	12	16.826	1.373	.189
Error	1384.954	113	12.256		
Total	31431.000	155			
Corrected Total	1857.574	154			

a R Squared = .254 (Adjusted R Squared = -.016)

Estimated Marginal Means

Education

Dependent Variable: Internal Locus of Control

Education	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Under graduate	13.348(a)	.803	11.758	14.939
Graduate	13.959	.575	12.820	15.098
Double & Post Graduate	12.999(a)	.697	11.618	14.380
More than PG	14.521(a)	.962	12.615	16.427

a Based on modified population marginal mean.

Post Hoc Tests
Type of Art

Multiple Comparisons

Dependent Variable: Internal Locus of Control
LSD

(I) Type of Art	(J) Type of Art	Mean Difference (I-J)	Std. Error	Sig.
Dance & Drama	Music	-.23	.693	.736
	Painting	-.98	.690	.160
Music	Dance & Drama	.23	.693	.736
	Painting	-.74	.683	.279
Painting	Dance & Drama	.98	.690	.160
	Music	.74	.683	.279

Based on observed means.

Education

Multiple Comparisons

Dependent Variable: Internal Locus of Control
LSD

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.
Under graduate	Graduate	-.94	.788	.234
	Double & Post Graduate	.76	.843	.370
	More than PG	-.93	1.120	.408
Graduate	Under graduate	.94	.788	.234
	Double & Post Graduate	1.70(*)	.675	.013
	More than PG	.01	1.000	.991
Double & Post Graduate	Under graduate	-.76	.843	.370
	Graduate	-1.70(*)	.675	.013
	More than PG	-1.69	1.044	.108
More than PG	Under graduate	.93	1.120	.408
	Graduate	-.01	1.000	.991
	Double & Post Graduate	1.69	1.044	.108

Based on observed means.

- The mean difference is significant at the .05 level.

Hypothesis - 36-37:

The null hypothesis that there are no significant differences in the amount of internals and externals with different Types of Art is accepted. (Output. 24, Hypothesis: 36). The null hypothesis that Type of Art has no significant effect on the internality of LOC is also accepted. (Output. 24, Hypothesis: 37).

Cross tabs: Output: 25, Hypothesis: 38

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Locus of Control category * Years of Experience	267	35.5%	485	64.5%	752	100.0%

Locus of Control category * Years of Experience Cross tabulation

			Years of Experience		Total
			20 & less than 20	more than 20	
Locus of Control category	External	Count	23	20	43
		% within Locus of Control category	53.5%	46.5%	100.0%
		% within Years of Experience	17.7%	14.6%	16.1%
		% of Total	8.6%	7.5%	16.1%
	Internal	Count	107	117	224
		% within Locus of Control category	47.8%	52.2%	100.0%
		% within Years of Experience	82.3%	85.4%	83.9%
		% of Total	40.1%	43.8%	83.9%
Total		Count	130	137	267
	% within Locus of Control category		48.7%	51.3%	100.0%
	% within Years of Experience		100.0%	100.0%	100.0%
	% of Total		48.7%	51.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.473(b)	1	.492		
Continuity Correction(a)	.271	1	.602		
Likelihood Ratio	.473	1	.492		
Fisher's Exact Test				.510	.301
Linear-by-Linear Association	.471	1	.493		
N of Valid Cases	267				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 20.94.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.042	.492
N of Valid Cases		267	

Univariate Analysis of Variance: OUTPUT: 25, HYPOTHESIS: 39

Between-Subjects Factors

		Value Label	N
Type of Religion	1	Hinduism	32
	2	Christianity	53
	3	Jainism	32
Years of Experience	0	20 & less than 20	62
	1	more than 20	55

Tests of Between-Subjects Effects

Dependent Variable: Internal Locus of Control

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	194.379(a)	5	38.876	3.192	.010
Intercept	24535.550	1	24535.550	2014.489	.000
religiontype	152.151	2	76.076	6.246	.003
years	50.695	1	50.695	4.162	.044
religiontype * years	2.885	2	1.443	.118	.888
Error	1351.929	111	12.180		
Total	29982.000	117			
Corrected Total	1546.308	116			

a R Squared = .126 (Adjusted R Squared = .086)

Estimated Marginal Means

Type of Religion

Dependent Variable: Internal Locus of Control

Type of Religion	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Hinduism	17.072	.686	15.713	18.432
Christianity	15.794	.482	14.840	16.748
Jainism	13.878	.618	12.654	15.103

Years of Experience

Dependent Variable: Internal Locus of Control

Years of Experience	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
20 & less than 20	14.873	.453	13.975	15.771
more than 20	16.290	.526	15.248	17.332

Post Hoc Tests
Type of Religion

Multiple Comparisons

Dependent Variable: Internal Locus of Control
LSD

(I) Type of Religion	(J) Type of Religion	Mean Difference (I-J)	Std. Error	Sig.
Hinduism	Christianity	.96	.781	.220
	Jainism	2.88(*)	.872	.001
Christianity	Hinduism	-.96	.781	.220
	Jainism	1.91(*)	.781	.016
Jainism	Hinduism	-2.88(*)	.872	.001
	Christianity	-1.91(*)	.781	.016

Based on observed means.
* The mean difference is significant at the .05 level.

Univariate Analysis of Variance: OUTPUT: 26, HYPOTHESIS: 40

Between-Subjects Factors

		Value Label	N
Type of Art	0	Dance & Drama	49
	1	Music	44
	2	Painting	54
Years of Experience	0	20 & less than 20	68
	1	more than 20	79

Tests of Between-Subjects Effects

Dependent Variable: Internal Locus of Control

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	59.966(a)	5	11.993	.987	.428
Intercept	26570.767	1	26570.767	2187.417	.000
arttype	32.307	2	16.154	1.330	.268
years	20.647	1	20.647	1.700	.194
arttype * years	7.848	2	3.924	.323	.724
Error	1712.741	141	12.147		
Total	29972.000	147			
Corrected Total	1772.707	146			

a R Squared = .034 (Adjusted R Squared = .000)

T-Test: OUTPUT: 26, HYPOTHESIS : 41

Group Statistics

	Internal Locus of Control Years of Experience	
	more than 20	20 & less than 20
N	134	130
Mean	14.99	14.25
Std. Deviation	3.728	3.557
Std. Error Mean	.322	.312

Independent Samples Test

			Internal Locus of Control	
			Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F		.385	
	Sig.		.535	
t-test for Equality of Means	t		1.647	1.648
	df		262	261.929
	Sig. (2-tailed)		.101	.101
	Mean Difference		.739	.739
	Std. Error Difference		.449	.448
	95% Confidence Interval of the Difference	Lower	-.145	-.144
		Upper	1.622	1.622

Hypothesis - 38-39-40-41:

The null hypothesis that there are no significant differences in the LOC categories of saints and artists with different years of experience is accepted. (Output. 25, Hypothesis: 38). As the percent

wise frequency table suggest, saints and artists having experience of 20 or less than 20 years, had greater number of externals than the internals, while saints/artists having experience more than 20 years had greater number of internals than externals. Thus, though increasing years show more internals, this difference is not statistically significant. However, ANOVA results further suggest that not frequency-wise, but score-wise, years of experience had significant effect on the internality of LOC among saints (Output. 25, Hypothesis: 39) but not among artists (Output. 26, Hypothesis: 40). Thus, amount of internality of locus of control of saints increases with the years of experience of more than 20, while among artists years of experience had no significant effect on the internality of locus of control. If saints and artists are taken together, then also years of experience of less than or more than 20 years of experience had no significant effect on the internality of LOC, as T-test analysis suggested. (Output. 26, Hypothesis: 41).

In short, artists and saints both do not differ significantly in LOC category with respect different years of experience. However, saints showed significant effect of the years of experience on the amount of internality of locus of control but not the artists.

Cross tabs: OUTPUT: 27, HYPOTHESIS: 42

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Locus of Control category * Age	354	47.1%	398	52.9%	752	100.0%

Locus of Control category * Age Cross tabulation

			Age			Total
			1-25	26-50	51-90	
Locus of Control category	External	Count	32	25	5	62
		% within Locus of Control category	51.6%	40.3%	8.1%	100.0%
		% within Age	20.0%	17.9%	9.3%	17.5%
		% of Total	9.0%	7.1%	1.4%	17.5%
	Internal	Count	128	115	49	292
		% within Locus of Control category	43.8%	39.4%	16.8%	100.0%
		% within Age	80.0%	82.1%	90.7%	82.5%
		% of Total	36.2%	32.5%	13.8%	82.5%
Total		Count	160	140	54	354
	% within Locus of Control category		45.2%	39.5%	15.3%	100.0%
	% within Age		100.0%	100.0%	100.0%	100.0%
	% of Total		45.2%	39.5%	15.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.243(a)	2	.198
Likelihood Ratio	3.645	2	.162
Linear-by-Linear Association	2.695	1	.101
N of Valid Cases	354		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.46.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.095	.198
N of Valid Cases		354	

Univariate Analysis of Variance: OUTPUT: 27 HYPOTHESIS: 43

Between-Subjects Factors

		Value Label	N
Age	0	1-25	159
	1	26-50	138
	2	51-90	53

Tests of Between-Subjects Effects

Dependent Variable: Internal Locus of Control

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	95.168(a)	2	47.584	3.616	.028
Intercept	59034.907	1	59034.907	4486.123	.000
age	95.168	2	47.584	3.616	.028
Error	4566.329	347	13.159		
Total	78278.000	350			
Corrected Total	4661.497	349			

a R Squared = .020 (Adjusted R Squared = .015)

Estimated Marginal Means

Age

Dependent Variable: Internal Locus of Control

Age	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1-25	13.943	.288	13.378	14.509
26-50	15.058	.309	14.451	15.665
51-90	14.736	.498	13.756	15.716

Post Hoc Tests

Age

Multiple Comparisons

Dependent Variable: Internal Locus of Control

LSD

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.
1-25	26-50	-1.11(*)	.422	.009
	51-90	-.79	.575	.169
26-50	1-25	1.11(*)	.422	.009
	51-90	.32	.586	.583
51-90	1-25	.79	.575	.169
	26-50	-.32	.586	.583

Based on observed means.

* The mean difference is significant at the .05 level.

Hypothesis -42-43:

The null hypothesis that the Ss of different age groups do not differ significantly with respect to their locus of control is accepted. (Output. 27, Hypothesis: 42). The proportion of externals decreases from younger, middle, and older groups respectively. Similarly, the proportion of internals increases with increasing age groups from younger (1-25), middle (26-50) to older (51-75 & above). However, this difference was not significant.

Though LOC category does not change significantly with age, and although within elder age group, the proportion of internals was higher (more than 80 %); the amount of internality of LOC was significantly affected by age (Output. 27, Hypothesis: 43). Thus, the null hypothesis that there are no significant differences in the internality of LOC of Ss with different age groups is rejected.

LSD analysis shows that middle-aged group showed significantly higher internality of LOC than the younger age group. This is quite natural that with increasing age, the experiences also enhance and a person develops more reality – orientation and less defensive tendency to project the causality of one's own reinforcements on external variables like fate or chance. To see the reinforcements, which one gets in his/her own life, as contingent not upon one's abilities, but upon chance or fate – reflects to a certain degree, a type of escapism or defense mechanism. As one increases in age, his life experiences also enrich and through repeated experiences of rewards and punishments, one learns that majority of reinforcements, which we get are contingent upon our own behavior, fate or chance or the so-called powerful externals have a little role to play in the scheme of our reinforcements. This learning by experiences with increasing age might be responsible for significantly

higher internality of LOC of the middle-aged group than the younger age group. The internality of LOC of the older age group was higher than the younger and less than the middle-aged group. However, the difference of the older with the younger and middle-aged group was not statistically significant.

Cross tabs: OUTPUT: 28, HYPOTHESIS: 44

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Locus of Control category * Gender	430	57.2%	322	42.8%	752	100.0%

Locus of Control category * Gender Cross tabulation

			Gender		Total
			Female	Male	
Locus of Control category	External	Count	40	32	72
		% within Locus of Control category	55.6%	44.4%	100.0%
		% within Gender	17.3%	16.1%	16.7%
		% of Total	9.3%	7.4%	16.7%
	Internal	Count	191	167	358
		% within Locus of Control category	53.4%	46.6%	100.0%
		% within Gender	82.7%	83.9%	83.3%
		% of Total	44.4%	38.8%	83.3%
Total		Count	231	199	430
	% within Locus of Control category		53.7%	46.3%	100.0%
	% within Gender		100.0%	100.0%	100.0%
	% of Total		53.7%	46.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.117(b)	1	.732		
Continuity Correction(a)	.045	1	.832		
Likelihood Ratio	.117	1	.732		
Fisher's Exact Test				.796	.417
Linear-by-Linear Association	.117	1	.733		
N of Valid Cases	430				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 33.32.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.016	.732
N of Valid Cases		430	

T-Test OUTPUT: 28, HYPOTHESIS: 45

Group Statistics

	Internal Locus of Control Gender	
	Male	Female
N	198	228
Mean	14.94	14.22
Std. Deviation	3.947	3.286
Std. Error Mean	.280	.218

Independent Samples Test

			Internal Locus of Control	
			Equal variances assumed	**Equal variances not assumed**
Levene's Test for Equality of Variances	F		10.235	
	Sig.		.001	
t-test for Equality of Means	t		2.056	2.030
	df		424	384.643
	Sig. (2-tailed)		.040	.043
	Mean Difference		.721	.721
	Std. Error Difference		.351	.355
	95% Confidence Interval of the Difference	Lower	.032	.023
		Upper	1.410	1.419

Hypothesis 44-45:

The null hypothesis that there are no gender-differences in Locus of control is accepted (Output. 28, Hypothesis 44) Males and females both had higher proportion of internals only. The gender-differences in LOC categories are non-significant.

Though males and females do not differ significantly with respect to Locus of control, their difference in the scores of internality of LOC was statistically significant. (Output. 28, Hypothesis: 45). As the Independent samples T-test suggests, males show significantly higher Internality of LOC than the females. Higher internality of LOC suggests better Mental Health and as review of literature has shown, Masculinity facilitates Mental Health. So, if normally males are assumed to be Masculine, it is consistent that males show

significantly higher internality of LOC. This study is consistent with the finding of Rao & Murthy (1984) in which females showed higher externality.

2. Sex-Role – Orientation Analysis:

Among all the above discussions of ANOVA results, Sex-Role Orientation was treated as Independent variable and its effects on the Dependent variables like Mental Health, Emotional Competence, Self – actualization and Internality of LOC, were discussed. Because Androgyny is the main topic of present research, and because Androgyny is one of the four Sex-Role Orientations, here Sex-Role Orientation analysis is further made with reference to other relevant variables too. Over and above, above stated four Dependent variables, now the differences in Sex-Role Orientations are discussed further with respect to Type of Person, Type of Religion, Type of Art, Age, Gender, Education, Years of Experience, and Personal Values. As Sex-Role Orientation and all these comparing variables yield results in Frequencies and categories, further SRO analysis with respect to above – cited variables were analyzed through Chi-square and contingency co-efficient ‘c’.

Cross tabs: OUTPUT: 29, HYPOTHESIS: 46

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Type of Person * Sex-role Orientation	558	74.2%	194	25.8%	752	100.0%

Sex-role Orientation * Type of Person Cross tabulation

			Type of Person			Total
			Normals	Saints	Artists	
Sex-role Orientation	Undifferentiated	Count	32	44	21	97
		% within Sex-role Orientation	33.0%	45.4%	21.6%	100.0%
		% within Type of Person	24.2%	17.7%	11.8%	17.4%
		% of Total	5.7%	7.9%	3.8%	17.4%
	Androgynous	Count	50	75	85	210
		% within Sex-role Orientation	23.8%	35.7%	40.5%	100.0%
		% within Type of Person	37.9%	30.2%	47.8%	37.6%
		% of Total	9.0%	13.4%	15.2%	37.6%
	Masculine	Count	13	25	31	69
		% within Sex-role Orientation	18.8%	36.2%	44.9%	100.0%
		% within Type of Person	9.8%	10.1%	17.4%	12.4%
		% of Total	2.3%	4.5%	5.6%	12.4%
	Feminine	Count	37	104	41	182
		% within Sex-role Orientation	20.3%	57.1%	22.5%	100.0%
		% within Type of Person	28.0%	41.9%	23.0%	32.6%
		% of Total	6.6%	18.6%	7.3%	32.6%
Total		Count	132	248	178	558
	% within Sex-role Orientation		23.7%	44.4%	31.9%	100.0%
	% within Type of Person		100.0%	100.0%	100.0%	100.0%
	% of Total		23.7%	44.4%	31.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.092(a)	6	.000
Likelihood Ratio	32.761	6	.000
Linear-by-Linear Association	.228	1	.633
N of Valid Cases	558		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.32.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.237	.000
N of Valid Cases		558	

Hypothesis - 46: Eriksons' Hypothesis:

The null hypothesis that there are no significant differences in Sex-Role Orientations of Saints, Artists, and Normals gets rejected. (Output. 29, Hypothesis: 46). This means that saints, artists, and normals differ significantly in their Sex-Role Orientations. As the results show, the proportion of Androgynous SRO is higher among saints (35.7 %) and artists (40.5 %) than among the normals (23.8%). Artists have the highest proportions of Androgynous Sex-Role Orientation, saints have higher, and the normals have minimum proportion of Androgynous Sex-Role Orientation and these differences are statistically significant.

Thus, Joan Erikson's hypothesis that saints and artists are Androgynous persons gets empirically validated here. Through the

worship of art and spirituality respectively, the artists and the saints reach that level of personality development automatically, where the Feminine and the Masculine (Anima & Animus) within one's own self get fully developed and synchronized to culminate into integrated personality of the 'Androgynous'. If we compare the proportion of Androgynous Sex-Role Orientation with the proportions of other Sex-Role Orientations within each category of the type of person, we find that within normals and within artists, the Androgynous Sex-Role Orientation is higher (37.9 % & 47.8 %) than the other Sex-Role Orientations. Even among artists and normals, the artists have significantly higher proportion of the Androgynous Sex-Role Orientation (47.8%) than the normals (37.9%). Thus, within the category of type of person and within the Sex-Role Orientation, both ways, artists have highest proportion of Androgynous Sex-Role Orientation. Thus, art facilitates Androgyny significantly higher than spirituality.

Though the Androgynous Sex-Role Orientation is significantly higher in saints (35.7 %) than the normals (23.8 %) within Sex-Role Orientation, within the type of person analysis, that is, within the saints only, if we compare the proportions of four Sex-Role Orientations, we find that within the saints, the Feminine Sex-Role Orientation is more preponderant (41.9%), even more than the Androgynous Sex-Role Orientation (30.2%). Thus, as predicted by Joan Erickson, though saints are more Androgynous than the normals, the spirituality and religion cultivates more feminity. This might be the reason, why Fritzof Capra, (1982) in his famous book 'The Turning Point' equates science with Masculinity and religion with

Feminity. This means that religion and spirituality first integrates the polarities of the Masculine and the Feminine, leading to higher Androgyny than Normals. But even within this higher Androgynous personality, the 'Logic of Care and Concern' as Gilligan said, or the principle of Love and compassion preponderates which are the signs of higher feminity.

To explain this more operationally, suppose a saint scores 5.0 on Masculinity and 5.95 on Feminity as measured by Bem's Sex-Role Inventory. Now, the 'Norms' for feminity is 4.90 and for Masculinity it is 4.95. Both the scores of a saint are higher than the Norms. So, a saint is, of course, categorized as 'Androgynous', but within this Androgynous Category also, saints feminity score (5.95) is higher than Masculinity (5.0), contrary to norms where Masculinity score (4.95) is higher than feminity (4.90). Thus, being consistent to Eriksons' hypothesis, saints are more Androgynous compared to normals, but within this higher Androgynous also, Feminity preponderates. In short, art indisputably facilitates Androgyny, while religion facilitates androgyny with a bend of higher feminity, underlying probably saints' higher development of universal love and compassion of the 'Divine' Feminine principle.

Within the Sex-Role Orientation analysis, the saints have highest proportion of Feminine Sex-Role Orientation (57.1%), while the artists have highest Masculine Sex-Role Orientation (44.9%), though both have higher Androgynous Sex-Role Orientation, compared to normals. So, it can be concluded that art facilitates Androgyny with a band of higher Masculinity, while religion facilitates Androgyny with a band of higher feminity.

Secondly, the Masculine (44.9%) and the Androgynous (40.5%) Sex-Role Orientations are found higher among artists, while the feminine (57.1%) and the Undifferentiated (45.4%) Sex-Role Orientations are found higher among saints. Higher Undifferentiated Sex-Role Orientation among saints might be due to their own underscoring of themselves on Bem's M-F adjectives which, in turn, might be because of their perfectionist ideal or 'Divine Discomfort as discussed earlier.

In short, Joan Erikson's hypothesis about the Androgyny of Saints and Artists gets empirically supported here.

Cross tabs: OUTPUT: 30 HYPOTHESIS: 47

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex-role Orientation * Type of Religion	248	33.0%	504	67.0%	752	100.0%

Sex-role Orientation * Type of Religion Cross tabulation

			Type of Religion				Total
			Buddhism	Hinduism	Christianity	Jainism	
Sex-role Orientation	Undifferentiated	Count	13	8	17	6	44
		% within Sex-role Orientation	29.5%	18.2%	38.6%	13.6%	100.0%
		% within Type of Religion	20.6%	12.9%	29.3%	9.2%	17.7%
		% of Total	5.2%	3.2%	6.9%	2.4%	17.7%
	Androgynous	Count	6	28	12	29	75
		% within Sex-role Orientation	8.0%	37.3%	16.0%	38.7%	100.0%
		% within Type of Religion	9.5%	45.2%	20.7%	44.6%	30.2%
		% of Total	2.4%	11.3%	4.8%	11.7%	30.2%
	Masculine	Count	7	5	6	7	25
		% within Sex-role Orientation	28.0%	20.0%	24.0%	28.0%	100.0%
		% within Type of Religion	11.1%	8.1%	10.3%	10.8%	10.1%
		% of Total	2.8%	2.0%	2.4%	2.8%	10.1%
	Feminine	Count	37	21	23	23	104
		% within Sex-role Orientation	35.6%	20.2%	22.1%	22.1%	100.0%
		% within Type of Religion	58.7%	33.9%	39.7%	35.4%	41.9%
		% of Total	14.9%	8.5%	9.3%	9.3%	41.9%
Total		Count	63	62	58	65	248
	% within Sex-role Orientation		25.4%	25.0%	23.4%	26.2%	100.0%
	% within Type of Religion		100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total		25.4%	25.0%	23.4%	26.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.127(a)	9	.000
Likelihood Ratio	36.030	9	.000
Linear-by-Linear Association	2.674	1	.102
N of Valid Cases	248		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.85.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.348	.000
N of Valid Cases		248	

Hypothesis – 47:

The null hypothesis that there are no significant differences in the Sex-Role Orientation of saints with different religions gets rejected. (Output. 30, Hypothesis: 47). This means that saints of different religions differ, significantly in their Sex-Role Orientations. If we compare the proportion of the Androgynous Sex-Role Orientation in different religions, i.e. within the type of religion, we find that Hinduism had highest amount (45.2 %) of Androgynous Sex-Role Orientation and then Jainism (44.6%), Christianity, (20.7%) and the Buddhism (9.5%) had respectively.

Hinduism, with its most openness and all-inclusiveness must be open with reference to sex stereotypes too. So, highest amount of Androgynous SRO in Hinduism is quite consistent. Though popularly

a belief is held that because of caste-ism and patriarchy, Hinduism would have greater amount of Gender Discrimination and insistence on sex stereotypes than other religions. But this is only a popularly held belief among so-called rationalists and intellectuals. Neither philosophically nor empirically this belief gets supported. Even from the feminist point-of view also, Hinduism is less closed, with reference to sexism with the form of God in Mother form, which no other religion has.

Secondly, this result reflects the psychology of saints only. It does not reflect the attitude of Hindu society in general. So, far as Hindu religiosity of saints is concerned, it is found to be more 'open' compared to other three religions with reference to sex-stereotypes.

Within the type of religion, the Masculine (11.1%) and the Feminine (58.7%) Sex-Role Orientations are found highest in Buddhism, compared to other religions. Within SRO also the Masculine (28%) and the Feminine (35.6%) are highest in Buddhism compared to other religions. Thus, stereotyped Sex-Role Orientations of males with Masculine and females with the Feminine Sex-Role Orientations are found highest in Buddhism in both SRO as well as Type of Religion analysis.

Not only the Androgynous but also the Feminine Sex-Role Orientation is higher in Hinduism and Jainism as compared to other religions within the type of religion analysis, which substantiates the previously discussed contention that religion facilitates androgyny with bend of higher Feminity. Christianity also had highest Feminine (38.6%) within type of religion analysis, which, as explained earlier,

might be due to the feminine principle of love, service and universal brotherhood as emphasized by Jesus.

Within SRO and within type of religion, both the way, Christianity had maximum Undifferentiated SRO compared to other religions. This reflects that, as stated earlier, saints in general have a tendency to underscore themselves because of their perfectionist ideal, which is more prominent in Christianity in comparison with other religions. This means that Christian saints may be most humble in their claims about themselves.

Hitherto, we compared same Sex-Role Orientation in different religions. Now, if we see take same religion, and compare the proportion of Sex-Role Orientations in one-religion only we find that within Hinduism (37.3%) and within Jainism (38.7%), the Androgynous Sex-Role Orientation was highest compared to other Sex-Role Orientations. Thus Jainism had more proportion of Androgynous SRO than the Hinduism had within SRO analysis, while within Buddhism (58.7%) and Christianity (39.7%), maximum number of saints were found to be Feminine, which might be due to their philosophical over-emphasis on the Feminine principle of love (Christianity) and compassion (Buddhism).

Cross tabs: OUTPUT: 31, HYPOTHESIS: 48

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex-role Orientation * Type of Art	178	23.7%	574	76.3%	752	100.0%

Sex-role Orientation * Type of Art Cross tabulation

			Type of Art			Total
			Dance & Drama	Music	Painting	
Sex-role Orientation	Undifferentiated	Count	1	13	7	21
		% within Sex-role Orientation	4.8%	61.9%	33.3%	100.0%
		% within Type of Art	1.8%	21.3%	11.7%	11.8%
		% of Total	.6%	7.3%	3.9%	11.8%
	Androgynous	Count	32	21	32	85
		% within Sex-role Orientation	37.6%	24.7%	37.6%	100.0%
		% within Type of Art	56.1%	34.4%	53.3%	47.8%
		% of Total	18.0%	11.8%	18.0%	47.8%
	Masculine	Count	10	10	11	31
		% within Sex-role Orientation	32.3%	32.3%	35.5%	100.0%
		% within Type of Art	17.5%	16.4%	18.3%	17.4%
		% of Total	5.6%	5.6%	6.2%	17.4%
	Feminine	Count	14	17	10	41
		% within Sex-role Orientation	34.1%	41.5%	24.4%	100.0%
		% within Type of Art	24.6%	27.9%	16.7%	23.0%
		% of Total	7.9%	9.6%	5.6%	23.0%
Total		Count	57	61	60	178
	% within Sex-role Orientation		32.0%	34.3%	33.7%	100.0%
	% within Type of Art		100.0%	100.0%	100.0%	100.0%
	% of Total		32.0%	34.3%	33.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.853(a)	6	.021
Likelihood Ratio	16.966	6	.009
Linear-by-Linear Association	1.902	1	.168
N of Valid Cases	178		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.72.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.278	.021
N of Valid Cases		178	

Hypothesis – 48:

The null hypothesis that there are no significant differences in the Sex-Role Orientations of artists with different Types of Art is rejected (Output. 31, Hypothesis: 48).

Type of person was found to be significantly associated with Sex-Role Orientation (Output. 29, Hypothesis: 46). Thus, saints, artists, and normals differed significantly with respect to Sex-Role Orientation. Not only that but Type of Religion among saints (Output. 30, Hypothesis: 47) and Type of Art among artists (Output. 31, Hypothesis: 48) were also significantly correlated with Sex-Role Orientations. Among the three Types of Art, the Dance/Drama and Painting/Sculpture- both had significantly higher and equal proportion (37.6%) of Androgynous Sex-Role Orientation than the music had. If

the same Sex-Role Orientation in different arts is analyzed, we find that Masculine SRO was maximum (35.5%) in painting/sculpture as compared to other arts. Dance/drama and Music had equal proportion of Masculine SRO (32.3%), though it was less than the painting/sculpture had. The Feminine Sex-Role Orientation was highest in music (41.5%) as compared to Dance/Drama (34.1%) and Painting/sculpture (24.4%). Within each Type of Art, the Androgynous Sex-Role Orientation was the highest in Dance/drama (56.1%) in comparison with other arts, while within the Sex-Role Orientation, the Feminine Sex-Role Orientation was highest in Music (27.9%), and the Masculine was highest in Painting/sculpture (35.5%).

Thus, within SRO and within the Type of Art, both ways, Music had maximum Feminine SRO, while painting/sculpture had maximum Masculine SRO, and Dance/drama had maximum Androgynous SRO. Though each art facilitates Androgyny, feminity was found to be more in music and masculinity was more in painting/sculpture, and androgyny was more in dance/drama Thus, Type of Art is found to be significantly and specifically correlated with Sex-Role Orientation. Each SRO is associated significantly with particular art only. This fact can be used as guidelines for counseling to develop particular SRO through particular art.

Cross tabs: OUTPUT: 32 HYPOTHESIS: 49

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex-role Orientation * Age	462	61.4%	290	38.6%	752	100.0%

Sex-role Orientation * Age Cross tabulation

			Age			Total
			1-25	26-40	41-90	
Sex-role Orientation	Undifferentiated	Count	44	21	8	73
		% within Sex-role Orientation	60.3%	28.8%	11.0%	100.0%
		% within Age	19.0%	13.2%	11.1%	15.8%
		% of Total	9.5%	4.5%	1.7%	15.8%
	Androgynous	Count	86	64	27	177
		% within Sex-role Orientation	48.6%	36.2%	15.3%	100.0%
		% within Age	37.2%	40.3%	37.5%	38.3%
		% of Total	18.6%	13.9%	5.8%	38.3%
	Masculine	Count	26	21	14	61
		% within Sex-role Orientation	42.6%	34.4%	23.0%	100.0%
		% within Age	11.3%	13.2%	19.4%	13.2%
		% of Total	5.6%	4.5%	3.0%	13.2%
	Feminine	Count	75	53	23	151
		% within Sex-role Orientation	49.7%	35.1%	15.2%	100.0%
		% within Age	32.5%	33.3%	31.9%	32.7%
		% of Total	16.2%	11.5%	5.0%	32.7%
Total		Count	231	159	72	462
	% within Sex-role Orientation		50.0%	34.4%	15.6%	100.0%
	% within Age		100.0%	100.0%	100.0%	100.0%
	% of Total		50.0%	34.4%	15.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.283(a)	6	.392
Likelihood Ratio	6.105	6	.411
Linear-by-Linear Association	1.310	1	.252
N of Valid Cases	462		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.51.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.116	.392
N of Valid Cases		462	

Hypothesis – 49:

The null hypothesis that there are no significant differences in the Sex-Role Orientation of subjects with different age groups is accepted. (Output. 32, Hypothesis: 49). Thus, age is not significantly associated with Sex-Role Orientation.

Cross tabs: OUTPUT: 33, HYPOTHESIS: 50

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex-role Orientation * Gender	558	74.2%	194	25.8%	752	100.0%

Sex-role Orientation * Gender Cross tabulation

			Gender		Total
			Female	Male	
Sex-role Orientation	Undifferentiated	Count	41	56	97
		% within Sex-role Orientation	42.3%	57.7%	100.0%
		% within Gender	14.1%	20.9%	17.4%
		% of Total	7.3%	10.0%	17.4%
	Androgynous	Count	110	100	210
		% within Sex-role Orientation	52.4%	47.6%	100.0%
		% within Gender	37.9%	37.3%	37.6%
		% of Total	19.7%	17.9%	37.6%
	Masculine	Count	20	49	69
		% within Sex-role Orientation	29.0%	71.0%	100.0%
		% within Gender	6.9%	18.3%	12.4%
		% of Total	3.6%	8.8%	12.4%
	Feminine	Count	119	63	182
		% within Sex-role Orientation	65.4%	34.6%	100.0%
		% within Gender	41.0%	23.5%	32.6%
		% of Total	21.3%	11.3%	32.6%
Total		Count	290	268	558
	% within Sex-role Orientation		52.0%	48.0%	100.0%
	% within Gender		100.0%	100.0%	100.0%
	% of Total		52.0%	48.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	31.396(a)	3	.000
Likelihood Ratio	32.026	3	.000
Linear-by-Linear Association	10.382	1	.001
N of Valid Cases	558		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 33.14.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.231	.000
N of Valid Cases		558	

Hypothesis – 50:

The null hypothesis about the gender differences in Sex-Role Orientation is rejected. (Output. 33, Hypothesis 50). Thus, males and females differ significantly with respect to Sex-Role Orientation. The Androgynous Sex-Role Orientation was significantly higher in females (52.4%) than males (47.6%) within SRO. Within Gender also, the Androgynous SRO was found to be significantly higher in females (37.9%) than in males (37.3%). The Feminine Sex-Role Orientation was higher in females and Masculine Sex-Role Orientation was higher in males in both way analysis of SRO and Gender, which is consistent to sex stereotyping. The Undifferentiated Sex-Role Orientation was higher in males (57.7%) than in females (42.3%) within SRO. Within Gender also the Undifferentiated was higher in

males (20.9%) than the females (14.1%). Within all the females studied here, Feminine Sex-Role Orientation (41.0%) was highest as compared to other Sex-Role Orientations, while within all the males studied here; Androgynous Sex-Role Orientation was highest (37.3%) as compared to other Sex-Role Orientations.

However, this highest proportion of Androgynous in males was also less than that in females (37.9%). Thus, compared to males, females had higher proportion of Androgynous Sex-Role Orientation. However, within females only, the feminine was higher than the Androgynous. In short, though more females tend to be Feminine, the Androgynous Sex-Role Orientation was significantly higher in females than males if both the sexes are compared SRO-wise or Gender wise. The Undifferentiated Sex-Role Orientation was higher in males than in females. Thus, if androgyny is considered to be socially desirable goal, then it can be said that present research shows females to be *superior* to males positively through higher Androgynous Sex-Role Orientation in females and negatively through lower proportion of Undifferentiated Sex-Role Orientation in females.

Cross tabs: OUTPUT: 34, HYPOTHESIS: 51

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex-role Orientation * Education	454	60.4%	298	39.6%	752	100.0%

Sex-role Orientation * Education Cross tabulation

			Education				Total
			Under graduate	Graduate	Double & Post Graduate	More than PG	
Sex-role Orientation	Undifferentiated	Count	7	34	23	13	77
		% within Sex-role Orientation	9.1%	44.2%	29.9%	16.9%	100.0%
		% within Education	8.1%	20.7%	17.7%	17.6%	17.0%
		% of Total	1.5%	7.5%	5.1%	2.9%	17.0%
	Androgynous	Count	33	63	59	28	183
		% within Sex-role Orientation	18.0%	34.4%	32.2%	15.3%	100.0%
		% within Education	38.4%	38.4%	45.4%	37.8%	40.3%
		% of Total	7.3%	13.9%	13.0%	6.2%	40.3%
	Masculine	Count	14	22	15	11	62
		% within Sex-role Orientation	22.6%	35.5%	24.2%	17.7%	100.0%
		% within Education	16.3%	13.4%	11.5%	14.9%	13.7%
		% of Total	3.1%	4.8%	3.3%	2.4%	13.7%
	Feminine	Count	32	45	33	22	132
		% within Sex-role Orientation	24.2%	34.1%	25.0%	16.7%	100.0%
		% within Education	37.2%	27.4%	25.4%	29.7%	29.1%
		% of Total	7.0%	9.9%	7.3%	4.8%	29.1%
Total		Count	86	164	130	74	454
	% within Sex-role Orientation		18.9%	36.1%	28.6%	16.3%	100.0%
	% within Education		100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total		18.9%	36.1%	28.6%	16.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.221(a)	9	.333
Likelihood Ratio	10.916	9	.281
Linear-by-Linear Association	2.333	1	.127
N of Valid Cases	454		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.11.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.148	.333
N of Valid Cases		454	

Hypothesis – 51:

The null hypothesis that there are no significant differences in the Sex-Role Orientations of the persons with different educational levels is accepted (Output. 34, Hypothesis 51). Thus education is not significantly associated with Sex-Role Orientation.

The common – sense belief that greater degree of education would lead to fostering Androgyny is falsified statistically. As Coleman J. C. (1971),

" A number of studies indicate that several changes in the direction of personal growth typically take place in college students. (Boyer & Michael, 1965; Friedman, 1965; Webster, Freedman & Heist, 1962)." The changes, which college years foster in students,

according to Coleman, are Independence & Autonomy, Decreased Dogmatism, Decreased Authoritarianism, Decreased Ethnocentrism, and shift in attitude concerning civil liberties. Thus according to Coleman, formal college education facilitates openness, democratic outlook and reduces orthodoxy and ethnocentrism. The logical corollary of Coleman's contention would be that the proportion of Androgynous Sex-Role Orientation must be higher in the Ss with higher education. But this implication is not empirically substantiated here.

Though within each educational category namely, undergraduate, Graduate, Double Post Graduate and more than Post Graduate – all had maximum number of Androgynous Sex-Role Orientation than the Masculine, Feminine and the Undifferentiated, these differences, education-wise and Sex-Role Orientation wise, were not statistically significant. Thus, education is not found to be significantly related to Sex-Role Orientation.

Cross tabs: OUTPUT: 35 HYPOTHESIS: 52

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex-role Orientation * Years of Experience	374	49.7%	378	50.3%	752	100.0%

Sex-role Orientation * Years of Experience Cross tabulation

			Years of Experience			Total
			20 & less than 20	more than 20	9	
Sex-role Orientation	Undifferentiated	Count	37	19	0	56
		% within Sex-role Orientation	66.1%	33.9%	.0%	100.0%
		% within Years of Experience	19.2%	10.6%	.0%	15.0%
		% of Total	9.9%	5.1%	.0%	15.0%
	Androgynous	Count	68	72	0	140
		% within Sex-role Orientation	48.6%	51.4%	.0%	100.0%
		% within Years of Experience	35.2%	40.0%	.0%	37.4%
		% of Total	18.2%	19.3%	.0%	37.4%
	Masculine	Count	24	27	0	51
		% within Sex-role Orientation	47.1%	52.9%	.0%	100.0%
		% within Years of Experience	12.4%	15.0%	.0%	13.6%
		% of Total	6.4%	7.2%	.0%	13.6%
	Feminine	Count	64	62	1	127
		% within Sex-role Orientation	50.4%	48.8%	.8%	100.0%
		% within Years of Experience	33.2%	34.4%	100.0%	34.0%
		% of Total	17.1%	16.6%	.3%	34.0%
Total		Count	193	180	1	374
		% within Sex-role Orientation	51.6%	48.1%	.3%	100.0%
		% within Years of Experience	100.0%	100.0%	100.0%	100.0%
		% of Total	51.6%	48.1%	.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.627(a)	6	.267
Likelihood Ratio	7.925	6	.244
Linear-by-Linear Association	2.931	1	.087
N of Valid Cases	374		

a 4 cells (33.3%) have expected count less than 5. The minimum expected count is .14.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.141	.267
N of Valid Cases		374	

Hypothesis – 52:

Similarly, the null hypothesis about the relationship between Sex-Role Orientation and the Years of experience is also accepted. (Output. 35, Hypothesis 52). Thus, the years of experience of 20 or less than 20 and more than 20 years in the field of art or spirituality had no significant correlation with one's Sex-Role Orientation.

Cross tabs: OUTPUT: 36, HYPOTHESIS: 53

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex-role Orientation * Personal Values	427	56.8%	325	43.2%	752	100.0%

Sex-role Orientation * Personal Values Cross tabulation

			Personal Values			Total
			Other	Religious	Aesthetic	
Sex-role Orientation	Undifferentiated	Count	41	24	12	77
		% within Sex-role Orientation	53.2%	31.2%	15.6%	100.0%
		% within Personal Values	18.6%	26.4%	10.4%	18.0%
		% of Total	9.6%	5.6%	2.8%	18.0%
	Androgynous	Count	89	29	52	170
		% within Sex-role Orientation	52.4%	17.1%	30.6%	100.0%
		% within Personal Values	40.3%	31.9%	45.2%	39.8%
		% of Total	20.8%	6.8%	12.2%	39.8%
	Masculine	Count	30	8	16	54
		% within Sex-role Orientation	55.6%	14.8%	29.6%	100.0%
		% within Personal Values	13.6%	8.8%	13.9%	12.6%
		% of Total	7.0%	1.9%	3.7%	12.6%
	Feminine	Count	61	30	35	126
		% within Sex-role Orientation	48.4%	23.8%	27.8%	100.0%
		% within Personal Values	27.6%	33.0%	30.4%	29.5%
		% of Total	14.3%	7.0%	8.2%	29.5%
Total		Count	221	91	115	427
	% within Sex-role Orientation		51.8%	21.3%	26.9%	100.0%
	% within Personal Values		100.0%	100.0%	100.0%	100.0%
	% of Total		51.8%	21.3%	26.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.564(a)	6	.072
Likelihood Ratio	11.970	6	.063
Linear-by-Linear Association	1.058	1	.304
N of Valid Cases	427		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.51.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.162	.072
N of Valid Cases		427	

Hypothesis – 53:

The null hypothesis that there are no significant differences in the Sex-Role Orientations of the subjects with different personal values is accepted. (Output. 36, Hypothesis: 53).

If Joan Erickson's hypothesis gets empirically validated by suggesting significant differences in Sex-Role Orientation with respect to type of person (Output. 29, Hypothesis: 46), then it implies that the subjects with three different personal values, namely Religious, Aesthetic and other, must also differ with respect to Sex-Role Orientation, because saints represent religious, artists represent Aesthetic and Normals represent other values, as per Spranger's classification of values. Joan Erickson said that saints and artists are Androgynous person, which got empirically supported (Output. 29, Hypothesis: 46). So, it follows logically that as per Spranger's

classification, Ss with Religious and Aesthetic values must have higher proportion of Androgynous Sex-Role Orientation than the Ss with other values.

In consistency of the results with type of person, here also Ss with Aesthetic values (artists) had maximum proportion of Androgynous Sex-Role Orientation (45.2%) than the Ss with religious (31.9%) and other (40.3%) within personal values. Thus, in value analysis and in type of person-analysis, both way artists had maximum proportion of Androgynous Sex-Role Orientation. However, in TP analysis, saints had significantly higher proportion of Androgynous Sex-Role Orientation than normals, while in value analysis, the Ss with Religious values had less proportion (31.9%) of Androgynous Sex-Role Orientation than the Ss with other (40.3%) values. This means that Ss with Aesthetic values share the traits of artists, but Ss with religious values do not necessarily share the traits of saints. Therefore, the results of artists and Aesthetic value tally with respect to Androgynous Sex-Role Orientation, but the results of saints and Religious values do not tally. Results differ significantly in case of saints and Ss with Religious values in comparison with normals/other values. However, Saints and Ss with Religious values both had maximum number of Feminine Sex-Role Orientation – this result replicates in TP-analysis as well as in Value-analysis. Thus, religion facilitates feminity underlying probably higher Feminine values of love, comparison, care, and concern.

Thus, the logical corollary of Joan Erickson's hypothesis gets partial empirical support when it is viewed in the light of personal values. Ss with Aesthetic values (artists) were found to have

significantly higher Androgynous Sex-Role Orientation than the Ss with 'Other' values (normals), but the Ss with religious values (saints) did not show higher proportion of Androgynous Sex-Role Orientation than the Ss with 'other' values (normals).

Cross tabs: OUTPUT: 37, HYPOTHESIS: 54

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sex-role Orientation * Locus of Control category	428	56.9%	324	43.1%	752	100.0%

Sex-role Orientation * Locus of Control category Cross tabulation

			Locus of Control category		Total
			External	Internal	
Sex-role Orientation	Undifferentiated	Count	13	63	76
		% within Sex-role Orientation	17.1%	82.9%	100.0%
		% within Locus of Control category	18.3%	17.6%	17.8%
		% of Total	3.0%	14.7%	17.8%
	Androgynous	Count	26	147	173
		% within Sex-role Orientation	15.0%	85.0%	100.0%
		% within Locus of Control category	36.6%	41.2%	40.4%
		% of Total	6.1%	34.3%	40.4%
	Masculine	Count	6	46	52
		% within Sex-role Orientation	11.5%	88.5%	100.0%
		% within Locus of Control category	8.5%	12.9%	12.1%
		% of Total	1.4%	10.7%	12.1%
	Feminine	Count	26	101	127
		% within Sex-role Orientation	20.5%	79.5%	100.0%
		% within Locus of Control category	36.6%	28.3%	29.7%
		% of Total	6.1%	23.6%	29.7%
Total		Count	71	357	428
	% within Sex-role Orientation		16.6%	83.4%	100.0%
	% within Locus of Control category		100.0%	100.0%	100.0%
	% of Total		16.6%	83.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.662(a)	3	.447
Likelihood Ratio	2.686	3	.443
Linear-by-Linear Association	.659	1	.417
N of Valid Cases	428		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.63.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.079	.447
N of Valid Cases		428	

Hypothesis – 54:

The null hypothesis that there are no significant differences in the Sex-Role Orientations of the Internal and External controls is accepted (Output. 37, Hypothesis: 54) as discussed earlier (Output. 22, Hypothesis: 28) in LOC analysis.

4. Androgyny Analysis:

Operationally, Androgyny constitutes one of the four Sex-Role Orientations as measured by Sandra Ben's Sex-Role Orientation Inventory. Hitherto, we discussed Sex-role Orientation as an Independent variable or treated four types of Sex-Role Orientation as categories for analyzing the significance of differences with groups of other variables. Androgyny was discussed, hitherto, only as a

quadrant part of Sex-role Orientation. But as Androgyny constitutes the main research topic of present thesis, all the Sex-Role Orientations were re-classified into two groups as Androgynous and Non-Androgynous. The Non-Androgynous groups imply the Ss with Feminine, Masculine or Undifferentiated Sex-Role Orientation i.e. Ss with Sex-Role Orientation other than the Androgynous. Thus, making Androgyny a separate variable, all the personality variables were analyzed in relation to Androgyny with separate relevant statistical tools and are discussed as under:

Cross tabs: OUTPUT: 38 HYPOTHESIS: 55

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * Androgyny	462	61.4%	290	38.6%	752	100.0%

Age * Androgyny Cross tabulation

			Androgyny		Total
			Non-androgynous	Androgynous	
Age	1-25	Count	146	85	231
		% within Age	63.2%	36.8%	100.0%
		% within Androgyny	50.9%	48.6%	50.0%
		% of Total	31.6%	18.4%	50.0%
	26-50	Count	95	64	159
		% within Age	59.7%	40.3%	100.0%
		% within Androgyny	33.1%	36.6%	34.4%
		% of Total	20.6%	13.9%	34.4%
	51-75	Count	46	26	72
		% within Age	63.9%	36.1%	100.0%
		% within Androgyny	16.0%	14.9%	15.6%
		% of Total	10.0%	5.6%	15.6%
Total		Count	287	175	462
	% within Age		62.1%	37.9%	100.0%
	% within Androgyny		100.0%	100.0%	100.0%
	% of Total		62.1%	37.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.591(a)	2	.744
Likelihood Ratio	.589	2	.745
Linear-by-Linear Association	.026	1	.873
N of Valid Cases	462		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 27.27.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.036	.744
N of Valid Cases		462	

Hypothesis – 55:

The null hypothesis that there are no significant differences in the Androgyny of Ss with different age groups is accepted. (Output. 38, Hypothesis: 55). This means that age is not significantly correlated with Androgyny.

Cross tabs: OUTPUT: 39, HYPOTHESIS: 56

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * Androgyny	558	74.2%	194	25.8%	752	100.0%

Gender * Androgyny Cross tabulation

			Androgyny		Total
			Non-androgynous	Androgynous	
Gender	Female	Count	182	108	290
		% within Gender	62.8%	37.2%	100.0%
		% within Androgyny	51.9%	52.2%	52.0%
		% of Total	32.6%	19.4%	52.0%
	Male	Count	169	99	268
		% within Gender	63.1%	36.9%	100.0%
		% within Androgyny	48.1%	47.8%	48.0%
		% of Total	30.3%	17.7%	48.0%
Total		Count	351	207	558
	% within Gender		62.9%	37.1%	100.0%
	% within Androgyny		100.0%	100.0%	100.0%
	% of Total		62.9%	37.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.005(b)	1	.941		
Continuity Correction(a)	.000	1	1.000		
Likelihood Ratio	.005	1	.941		
Fisher's Exact Test				1.000	.506
Linear-by-Linear Association	.005	1	.941		
N of Valid Cases	558				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 99.42.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.003	.941
N of Valid Cases		558	

T-Test: OUTPUT: 39 HYPOTHESIS: 56 (extra)

Group Statistics

	Positive Self-Evaluation	
	Gender	
	Male	Female
N	204	235
Mean	31.43	31.34
Std. Deviation	5.094	4.279
Std. Error Mean	.357	.279

Independent Samples Test

			Positive Self-Evaluation	
			Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F		6.881	
	Sig.		.009	
t-test for Equality of Means	t		.202	.199
	df		437	398.225
	Sig. (2-tailed)		.840	.842
	Mean Difference		.090	.090
	Std. Error Difference		.447	.453
	95% Confidence Interval of the Difference	Lower	-.789	-.800
		Upper	.970	.981

Hypothesis – 56:

Similarly, the null hypothesis that there are no significant gender differences in Androgyny is also accepted. (Output. 39, Hypothesis: 56). Thus, males and females do not differ significantly in Androgyny.

This result justifies the separate analysis of Androgyny, because SRO analysis showed significant gender differences in SRO, with females showing higher amount of Androgynous SRO. But only Androgyny analysis does not substantiates gender differences. This means that significant gender differences in SRO analysis may be with respect to the SRO other than the Androgynous.

It is very important to note here that Sex-Role Orientation analysis (Output. 33, Hypothesis 50) showed significant Gender differences in Sex-Role Orientation. The -Sex-Role Orientation x Gender- cross tabulation showed females to be superior to males positively in Androgynous Sex-Role Orientation and negatively by showing less proportion of Undifferentiated Sex-Role Orientation in females. However, as the Androgyny analysis suggests, Gender differences in Androgynous Sex-Role Orientation are non-significant. This means that significant Gender differences observed in Sex-Role Orientation analysis were not due to differences in Androgynous Sex-Role Orientation, but due to differences in the other three Sex-Role Orientation.

Considering the Androgyny analysis, we can't conclude on the basis of significant Gender-differences in Sex-Role Orientation, that females are superior to males positively by having more Androgynous Sex-Role Orientation, but still negatively having significantly less proportion of Undifferentiated Sex-Role Orientation in females than in males, establishes females' superiority in Sex-Role Orientation. Saints had greater proportion of Undifferentiated Sex-Role Orientation which was ascribed to their underscoring of themselves due to their perfectionist ideal and 'Divine Discontent' about

themselves, but males' higher proportion of Undifferentiated Sex-Role Orientation cannot be interpreted as due to their perfectionist ideal, because as the T-test on the males' & females' scores on 'Positive Self-Evaluation' (PSE), suggests males do not reflect the tendency of under evaluating themselves, rather males scored significantly higher on positive self-evaluation than females. (Output. 39, Hypothesis: 56 extra). Thus, the higher proportion of Undifferentiated in males is not due to their under-scoring or humble scoring about themselves. This reinforces the conclusion that females remain though negatively, superior to males in their Sex-Role Orientation through their significantly less proportion of the Undifferentiated Sex-Role Orientation, However more important is that there are no significant Gender differences in Androgyny.

Cross tabs: OUTPUT: 40, HYPOTHESIS: 57

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Education * Androgyny	454	60.4%	298	39.6%	752	100.0%

Education * Androgyny Cross tabulation

			Androgyny		Total
			Non-androgynous	Androgynous	
Education	Under graduate	Count	53	33	86
		% within Education	61.6%	38.4%	100.0%
		% within Androgyny	19.3%	18.3%	18.9%
		% of Total	11.7%	7.3%	18.9%
	Graduate	Count	102	62	164
		% within Education	62.2%	37.8%	100.0%
		% within Androgyny	37.2%	34.4%	36.1%
		% of Total	22.5%	13.7%	36.1%
	Double & Post Graduate	Count	72	58	130
		% within Education	55.4%	44.6%	100.0%
		% within Androgyny	26.3%	32.2%	28.6%
		% of Total	15.9%	12.8%	28.6%
	More than PG	Count	47	27	74
		% within Education	63.5%	36.5%	100.0%
		% within Androgyny	17.2%	15.0%	16.3%
		% of Total	10.4%	5.9%	16.3%
Total		Count	274	180	454
	% within Education		60.4%	39.6%	100.0%
	% within Androgyny		100.0%	100.0%	100.0%
	% of Total		60.4%	39.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.941(a)	3	.585
Likelihood Ratio	1.929	3	.587
Linear-by-Linear Association	.080	1	.777
N of Valid Cases	454		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 29.34.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.065	.585
N of Valid Cases		454	

Hypothesis – 57:

The null hypothesis that there are no significant differences in the Androgyny of Ss with different educational levels is accepted. (Output. 40, Hypothesis: 57). Sex-Role Orientation analysis (Output. 34, Hypothesis: 51) and Androgyny analysis, both suggested that Sex-Role Orientation or Androgyny is not significantly correlated with education.

We know that Sex stereotyping is learnt through socialization. So, one's Sex-Role Orientation is a product of social learning. In socialization, family and education plays major role. If the results of present research indicate that education is not significantly correlated

with Androgyny, then it means that family and other social processes play more significant role in development of Sex-Role Orientation.

Cross tabs: OUTPUT: 41, HYPOTHESIS: 58

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Type of Person * Androgyny	558	74.2%	194	25.8%	752	100.0%

Type of Person * Androgyny Cross tabulation

			Androgyny		Total
			Non-androgynous	Androgynous	
Type of Person	Normals	Count	82	50	132
		% within Type of Person	62.1%	37.9%	100.0%
		% within Androgyny	23.4%	24.2%	23.7%
		% of Total	14.7%	9.0%	23.7%
	Saints	Count	174	74	248
		% within Type of Person	70.2%	29.8%	100.0%
		% within Androgyny	49.6%	35.7%	44.4%
		% of Total	31.2%	13.3%	44.4%
	Artists	Count	95	83	178
		% within Type of Person	53.4%	46.6%	100.0%
		% within Androgyny	27.1%	40.1%	31.9%
		% of Total	17.0%	14.9%	31.9%
Total		Count	351	207	558
	% within Type of Person		62.9%	37.1%	100.0%
	% within Androgyny		100.0%	100.0%	100.0%
	% of Total		62.9%	37.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.565(a)	2	.002
Likelihood Ratio	12.553	2	.002
Linear-by-Linear Association	3.548	1	.060
N of Valid Cases	558		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 48.97.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.148	.002
N of Valid Cases		558	

Hypothesis – 58:

The null hypothesis that there are no significant differences in the Androgyny of saints, artists, and normals is rejected. (Output. 41, Hypothesis: 58). As the results suggest, artists (40.1%) and saints (35.7%) had higher Androgyny than normals (24.2%) within Androgyny analysis. Thus, Joan Erickson's hypothesis gets empirical support through Sex-Role Orientation analysis and also through Androgyny analysis. Thus, type of person is significantly correlated with Androgyny.

Cross tabs: OUTPUT: 42, HYPOTHESIS: 59

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Androgyny * Type of Religion	248	33.0%	504	67.0%	752	100.0%

Type of Religion * Androgyny Cross tabulation

			Androgyny		Total
			Non-androgynous	Androgynous	
Type of Religion	Buddhism	Count	57	6	63
		% within Type of Religion	90.5%	9.5%	100.0%
		% within Androgyny	32.8%	8.1%	25.4%
		% of Total	23.0%	2.4%	25.4%
	Hinduism	Count	34	28	62
		% within Type of Religion	54.8%	45.2%	100.0%
		% within Androgyny	19.5%	37.8%	25.0%
		% of Total	13.7%	11.3%	25.0%
	Christianity	Count	46	12	58
		% within Type of Religion	79.3%	20.7%	100.0%
		% within Androgyny	26.4%	16.2%	23.4%
		% of Total	18.5%	4.8%	23.4%
	Jainism	Count	37	28	65
		% within Type of Religion	56.9%	43.1%	100.0%
		% within Androgyny	21.3%	37.8%	26.2%
		% of Total	14.9%	11.3%	26.2%
Total		Count	174	74	248
	% within Type of Religion		70.2%	29.8%	100.0%
	% within Androgyny		100.0%	100.0%	100.0%
	% of Total		70.2%	29.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.132(a)	3	.000
Likelihood Ratio	29.315	3	.000
Linear-by-Linear Association	9.128	1	.003
N of Valid Cases	248		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.31.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.314	.000
N of Valid Cases		248	

Hypothesis – 59:

The null hypothesis that there are no significant differences in the Androgyny of saints with different Types of Religion is rejected. (Output. 42, Hypothesis: 59). That is, saints of different religions differ significantly in Androgyny. Whether analyzed within Androgyny or analyzed within Type of Religion – both the way, Hinduism showed significantly higher Androgyny than Buddhism, Jainism, and Christianity. Considering within Androgyny analysis, Hinduism had equal proportion of Androgyny to Jainism too. As discussed earlier, this higher proportion of Androgyny in Hinduism suggests more openness and flexibility and less rigidity about sex stereotyping in

Hinduism. This conclusion is consistent with the observation of Arnold Toyanbee, who considered Hinduism to be most open among all world religions. Within Androgyny and within Type of Religion analysis, both the way, Christianity showed minimum Androgyny.

However, this does not mean necessarily that Christianity support sexism. Because, as Sex-Role Orientation analysis had suggested (Output. 30, Hypothesis: 47) among Christian Saints, maximum saints, including males also were found to be Feminine. Buddhism also had higher proportion Feminine Sex-Role Orientation among Buddhist saints. This implies that probably Christianity with Jesus' principal message of Love, Care, Concern, and Service for humanity fosters Feminity of 'Divine Category'. Similarly, Buddhism, with Lord Buddha's principal message of compassion for all might be fostering Feminity of 'Divine Category' among Buddhist Saints. In Hinduism and Jainism also, Feminine Sex-Role Orientation is found on second rank after Androgynous Sex-Role Orientation (Output. 30, Hypothesis: 47). This means that, religion develops Androgyny through integration of the Masculine and the Feminine within ones own self. In comparison with normalcy, religion does fosters Androgyny, but within the saints, higher proportion of Feminine Sex-Role Orientation (Output. 29, Hypothesis: 46) suggests that even after Androgyny, the feminity of 'Divine Category' is developed underlying universal love and compassion which is more evident in Christianity and Jainism.

To conclude, the Androgynous and the Feminine Sex-Role Orientation are preponderating in all religions and the differences in Sex-Role Orientations are statistically significant. This means that

Type of Religion is significantly correlated with Sex-Role Orientation in general (Output. 30) and with Androgyny in particular. (Output. 42).

Cross tabs: OUTPUT: 43, HYPOTHESIS: 60

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Androgyny * Type of Art	178	23.7%	574	76.3%	752	100.0%

Androgyny * Type of Art Cross tabulation

			Type of Art			Total
			Dance & Drama	Music	Painting	
Androgyny	Non-androgynous	Count	26	40	29	95
		% within Androgyny	27.4%	42.1%	30.5%	100.0%
		% within Type of Art	45.6%	65.6%	48.3%	53.4%
		% of Total	14.6%	22.5%	16.3%	53.4%
	Androgynous	Count	31	21	31	83
		% within Androgyny	37.3%	25.3%	37.3%	100.0%
		% within Type of Art	54.4%	34.4%	51.7%	46.6%
		% of Total	17.4%	11.8%	17.4%	46.6%
Total		Count	57	61	60	178
	% within Androgyny		32.0%	34.3%	33.7%	100.0%
	% within Type of Art		100.0%	100.0%	100.0%	100.0%
	% of Total		32.0%	34.3%	33.7%	100.0%

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.640(a)	2	.060
Likelihood Ratio	5.714	2	.057
Linear-by-Linear Association	.067	1	.796
N of Valid Cases	178		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.58.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.175	.060
N of Valid Cases		178	

Hypothesis – 60:

The null hypothesis that there are no significant differences in Androgyny of artists with different Types of Art is accepted. (Output. 43, Hypothesis: 60) Type of Person (Output. 41) was significantly correlated with Androgyny, the Type of Religion among saints (Output. 42, Hypothesis: 59) was also significantly related to Androgyny, but the Type of Art among artists (Output. 43, Hypothesis: 60) is not significantly correlated with Androgyny.

Type of Person analysis had suggested that artists have maximum Androgyny (Output. 41, Hypothesis: 58) as compared to saints and normals. Thus art was found to be most functional in

facilitating Androgyny. However, further analysis within the Types of Art (Output. 43, Hypothesis: 60) suggests no significant differences among different art with respect to Androgyny. Because artists have significantly higher amount of androgynous SRO than the saints and normals, it can be said on the basis of Type of Person analysis in SRO and in Androgyny, that art does facilitates Androgyny, but not the Type of Art being worshipped. Any art is helpful in facilitating Androgyny, be it dance/drama, painting/ sculpture, or be it music. Type of art is not significantly associated with Androgyny.

This result also justifies the separate Androgyny analysis made here over and above SRO analysis. In SRO analysis, Type of Art was found to be significantly associated with SRO (Hypothesis: 48), implying significantly higher amount of Androgyny in Dance/drama. But separate Androgyny analysis only suggests that the significant differences observed among different arts with respect to SRO were due to the SRO other than the Androgynous. In short, Type of Art is not significantly correlated with Androgyny.

In this way, Type of Religion followed by saints, but not the Type of Art, worshipped by artists is significantly correlated with Androgyny.

Cross tabs: OUTPUT: 44, HYPOTHESIS: 61

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Androgyny * Years of Experience	374	49.7%	378	50.3%	752	100.0%

Androgyny * Years of Experience Cross tabulation

			Years of Experience			Total
			20 & less than 20	more than 20	9	
Androgyny	Non-androgynous	Count	126	109	1	236
		% within Androgyny	53.4%	46.2%	.4%	100.0%
		% within Years of Experience	65.3%	60.6%	100.0%	63.1%
		% of Total	33.7%	29.1%	.3%	63.1%
	Androgynous	Count	67	71	0	138
		% within Androgyny	48.6%	51.4%	.0%	100.0%
		% within Years of Experience	34.7%	39.4%	.0%	36.9%
		% of Total	17.9%	19.0%	.0%	36.9%
Total		Count	193	180	1	374
	% within Androgyny		51.6%	48.1%	.3%	100.0%
	% within Years of Experience		100.0%	100.0%	100.0%	100.0%
	% of Total		51.6%	48.1%	.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.481(a)	2	.477
Likelihood Ratio	1.816	2	.403
Linear-by-Linear Association	.041	1	.839
N of Valid Cases	374		

a 2 cells (33.3%) have expected count less than 5. The minimum expected count is .37.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.063	.477
N of Valid Cases		374	

Hypothesis – 61:

The null hypothesis that there are no significant differences in the Androgyny of Ss with different Years of Experience is accepted. (Output. 44, Hypothesis: 61). This means that Years of Renunciation in saints' life and Years of Experience in artists' life are not significantly correlated with Androgyny. In other words, the quantitative measures of how many years have been passed in particular religion or art is non-significant so far as the development of Androgyny among saints and artists was concerned.

Androgyny Analysis with reference to Personality Correlates:

The title of present research is 'A Study of Some Personality Correlates of Androgyny among Saints and Artists'. Therefore now we will analyze and discuss personality correlates of Androgyny. The personality correlates selected for Androgyny-analysis in present research were Mental Health, Emotional Competence, Self-actualization, Locus of Control, Internality of LOC and Personal values, over and above the demographic variables like Age, Gender and Education. All these variables are already discussed with reference to Sex-Role Orientation, in general but not in the particular context of Androgyny.

Because all these variables are personality variables, they all to a certain extent affect each other. The correlation of one particular personality variable with Androgyny may confound with the effects of other personality variables too. The correlation of any one variable with the other may underlie the effect of any third variable. Thus in

such case of overlapping, the effect of third variable has been partialled out through the method of statistical control of Partial Correlation. Thus to have more 'pure' correlation between any two personality variables selected here, all the third variables are statistically controlled one-by-one through the method of Partial Correlation. So Partial correlations of Androgyny with each personality variable were also calculated, together with normal correlations, which are discussed now as under:

Cross tabs: OUTPUT: 45, HYPOTHESIS: 62

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Mental Health * Androgyny	437	58.1%	315	41.9%	752	100.0%

Mental Health * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Mental Health	0	0	1	1
	112	1	0	1
	124	1	0	1
	128	1	0	1
	130	1	0	1
	132	1	0	1
	133	2	0	2
	134	1	0	1
	135	2	0	2
	136	1	0	1
	137	3	0	3
	138	1	0	1
	139	3	0	3
	140	2	0	2
	141	3	1	4
	142	0	1	1
	143	2	3	5
	144	4	1	5
	146	1	1	2
	147	1	2	3
	148	1	2	3
	149	3	1	4
	150	3	0	3
	151	1	1	2
	152	1	2	3
	153	2	1	3
	154	5	1	6
	155	5	0	5
	156	4	3	7
	157	6	4	10
	158	4	1	5
	159	9	3	12
	160	2	2	4
	161	7	1	8
	162	4	5	9
	163	5	0	5
	164	4	1	5
	165	9	3	12
	166	8	1	9
	167	6	1	7
	168	5	2	7

169	4	4	8
170	7	3	10
171	5	2	7
172	2	3	5
173	5	4	9
174	5	0	5
175	8	3	11
176	8	8	16
177	6	4	10
178	6	6	12
179	9	2	11
180	6	2	8
181	4	1	5
182	5	6	11
183	3	2	5
184	4	3	7
185	5	3	8
186	1	4	5
187	2	6	8
188	4	5	9
189	2	4	6
190	2	2	4
191	2	3	5
192	3	4	7
193	1	5	6
194	2	1	3
195	1	3	4
196	7	7	14
197	3	2	5
198	7	4	11
199	4	1	5
201	2	3	5
202	1	0	1
203	2	3	5
205	2	1	3
206	0	3	3
207	0	1	1
208	0	1	1
209	0	1	1
210	0	2	2
212	0	1	1
213	0	1	1
214	0	1	1
218	1	0	1
219	0	1	1
Total	**266**	**171**	**437**

Directional Measures

			Value
Nominal by Interval	Eta	Mental Health Dependent	.204
		Androgyny Dependent	.475

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.204	.058	4.352	.000(c)
Ordinal by Ordinal	Spearman Correlation	.238	.046	5.114	.000(c)
N of Valid Cases		437			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: *45,* Hypothesis: 62.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Androgyny * Mental Health Category	435	57.8%	317	42.2%	752	100.0%

Androgyny * Mental Health Category Cross tabulation

			Mental Health Category					Total
			Very Poor	Poor	Average	Good	Very good	
Androgyny	Non-androgynous	Count	5	37	111	85	28	266
		% within Androgyny	1.9%	13.9%	41.7%	32.0%	10.5%	100.0%
		% within Mental Health Category	100.0%	69.8%	71.6%	53.1%	45.2%	61.1%
		% of Total	1.1%	8.5%	25.5%	19.5%	6.4%	61.1%
	Androgynous	Count	0	16	44	75	34	169
		% within Androgyny	.0%	9.5%	26.0%	44.4%	20.1%	100.0%
		% within Mental Health Category	.0%	30.2%	28.4%	46.9%	54.8%	38.9%
		% of Total	.0%	3.7%	10.1%	17.2%	7.8%	38.9%
Total		Count	5	53	155	160	62	435
		% within Androgyny	1.1%	12.2%	35.6%	36.8%	14.3%	100.0%
		% within Mental Health Category	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	1.1%	12.2%	35.6%	36.8%	14.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.002(a)	4	.000
Likelihood Ratio	24.817	4	.000
Linear-by-Linear Association	19.277	1	.000
N of Valid Cases	435		

a 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.94.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.224	.000
N of Valid Cases		435	

Partial Corr: OUTPUT: 45, HYPOTHESIS: 62.2

Correlations

Control Variables			Androgyny	Mental Health
Self-Actualization & Emotional Competence & Locus of Control category & Internal Locus of Control & Personal Values	Androgyny	Correlation	1.000	.108
		Significance (2-tailed)	.	.029
		Df	0	404
	Mental Health	Correlation	.108	1.000
		Significance (2-tailed)	.029	.
		Df	404	0

Partial Corr

Correlations

Control Variables			Androgyny	Mental Health
Self-Actualization	Androgyny	Correlation	1.000	.190
		Significance (2-tailed)	.	.000
		df	0	429
	Mental Health	Correlation	.190	1.000
		Significance (2-tailed)	.000	.
		df	429	0

Partial Corr

Correlations

Control Variables			Androgyny	Mental Health
Emotional Competence	Androgyny	Correlation	1.000	.120
		Significance (2-tailed)	.	.012
		Df	0	432
	Mental Health	Correlation	.120	1.000
		Significance (2-tailed)	.012	.
		Df	432	0

Partial Corr

Correlations

Control Variables			Androgyny	Mental Health
LOC category	Androgyny	Correlation	1.000	.243
		Significance (2-tailed)	.	.000
		Df	0	418
	Mental Health	Correlation	.243	1.000
		Significance (2-tailed)	.000	.
		Df	418	0

Partial Corr

Correlations

Control Variables			Androgyny	Mental Health
INTLOC	Androgyny	Correlation	1.000	.242
		Significance (2-tailed)	.	.000
		Df	0	414
	Mental Health	Correlation	.242	1.000
		Significance (2-tailed)	.000	.
		Df	414	0

Partial Corr

Correlations

Control Variables			Androgyny	Mental Health
Personal Values	Androgyny	Correlation	1.000	.250
		Significance (2-tailed)	.	.000
		Df	0	423
	Mental Health	Correlation	.250	1.000
		Significance (2-tailed)	.000	.
		Df	423	0

Hypothesis – 62:

The null hypothesis that there is no significant correlation between Mental Health and Androgyny is rejected. (Output. 45, Hypothesis: 62). As the Androgyny results were in frequency form and the Mental Health results were in score-form, Eta – correlation for nominal by interval scale-data, was computed and as the results show, the correlation between the two was positive and statistically significant. (Output. 45, Hypothesis: 62).

Mental Health scores led to categorize the Ss into five categories of Very Poor, Poor, Average, Good, and Very Good

Mental Health. So cross – tabulation of Androgyny (with 2 categories) and Mental Health (with 5 categories) with chi-square and contingency co-efficient for nominal by nominal-data was also calculated (Output. 45, Hypothesis: 62.1), and as the results show, the correlation between the two was positive and statistically significant. The Androgynous had maximum proportion of 'Good' Mental Health (44.4%), while the Non-Androgynous showed maximum proportion (41.7%) in 'Average' category of Mental Health within Androgyny analysis. If we analyze the MH category, then also we find that the Androgynous had maximum proportion (54.8%) in Very Good Mental Health and then secondarily, in Good Mental Health category (46.9%); while within the MH category analysis, the Non-androgynous had maximum proportion in Average (71.6%) and then in Poor (69.8%), Mental Health category.

Thus, score-wise Eta correlation and category-wise contingency coefficient, both suggest that Androgyny significantly contributes in facilitating good Mental Health. Androgyny is positively correlated with MH and Non-androgynous are significantly correlated with average or poor MH.

Thus, Androgyny facilitates Mental Health. Both are positively correlated. ANOVA results also showed significantly higher Mental Health scoring of the Androgynous (Output. 1, Hypothesis: 1).

Finally most important fact is that the partial correlation between Androgyny and Mental Health is also found to be statistically significant and positive (Output. 45, Hypothesis: 62.2) when the effects of EC, SEA, LOC, Int. LOC and PV were statistically controlled together as well as independently.

In short, integration of the Anima and Animas within one's own personality as reflected by Androgyny positively facilitates the Mental Health. This finding is quite consistent with a number of findings of previous studies as discussed in Review of Literature.

Cross tabs: OUTPUT: 46, HYPOTHESIS: 63

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Emotional Competence * Androgyny	436	58.0%	316	42.0%	752	100.0%

Emotional Competence * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Emotional Competence	174	1	0	1
	186	1	0	1
	191	1	0	1
	194	2	0	2
	197	1	0	1
	198	1	0	1
	204	1	0	1
	205	1	0	1
	206	2	0	2
	208	2	0	2
	212	1	0	1
	213	2	2	4
	215	1	0	1
	216	2	0	2
	219	2	0	2
	220	2	1	3
	221	2	0	2
	222	0	1	1
	223	3	0	3
	224	1	0	1
	225	0	1	1

228	0	2	2
229	1	1	2
230	3	0	3
231	2	1	3
232	3	0	3
233	0	1	1
234	1	1	2
236	1	0	1
237	3	0	3
238	1	0	1
239	1	0	1
241	2	0	2
242	0	1	1
243	1	1	2
244	0	2	2
245	4	0	4
248	1	1	2
249	2	0	2
250	3	2	5
251	0	2	2
252	3	0	3
253	3	1	4
254	1	3	4
255	3	1	4
256	2	1	3
257	1	3	4
259	1	1	2
261	6	1	7
262	1	0	1
263	3	2	5
264	2	1	3
265	5	2	7
266	4	0	4
267	4	0	4
268	3	2	5
269	5	7	12
270	1	1	2
271	7	2	9
272	4	1	5
273	10	1	11
274	4	1	5
275	3	0	3
276	2	0	2
277	2	0	2
278	4	2	6
279	5	3	8
280	3	2	5

281	6	2	8
282	3	2	5
283	2	1	3
284	6	3	9
285	4	0	4
286	2	6	8
287	2	2	4
288	5	1	6
289	5	3	8
290	5	1	6
292	4	2	6
293	3	3	6
294	4	4	8
295	4	1	5
296	1	2	3
297	2	0	2
298	4	4	8
299	1	0	1
300	7	7	14
301	2	1	3
302	1	7	8
303	0	3	3
304	5	3	8
305	2	3	5
306	4	5	9
307	0	1	1
308	0	1	1
309	3	3	6
310	3	1	4
311	0	2	2
312	2	1	3
313	1	4	5
314	0	4	4
316	1	3	4
317	2	1	3
318	2	1	3
319	0	1	1
320	1	1	2
321	2	1	3
322	1	3	4
325	1	1	2
326	2	0	2
327	0	1	1
328	2	1	3
329	1	0	1
330	2	3	5
331	1	0	1

332	1	0	1
333	1	1	2
334	0	1	1
335	0	2	2
336	1	0	1
337	0	2	2
339	0	1	1
345	0	1	1
346	0	1	1
349	1	0	1
353	1	1	2
358	0	2	2
Total	**266**	**170**	**436**

Directional Measures

			Value
Nominal by Interval	Eta	Emotional Competence Dependent	.250
		Androgyny Dependent	.586

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.250	.043	5.373	.000(c)
Ordinal by Ordinal	Spearman Correlation	.251	.046	5.412	.000(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs OUTPUT: 46 HYPOTHESIS: 63.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Androgyny * Emotional Competence category	436	58.0%	316	42.0%	752	100.0%

Androgyny * Emotional Competence category Cross tabulation

			Emotional Competence category					Total
			Highly Incompetent	**Incompetent**	**Average**	**Competent**	**Highly Competent**	
Androgyny	Non-androgynous	Count	1	27	183	33	22	266
		% within Androgyny	.4%	10.2%	68.8%	12.4%	8.3%	100.0%
		% within Emotional Competence category	100.0%	87.1%	66.8%	41.8%	43.1%	61.0%
		% of Total	.2%	6.2%	42.0%	7.6%	5.0%	61.0%
	Androgynous	Count	0	4	91	46	29	170
		% within Androgyny	.0%	2.4%	53.5%	27.1%	17.1%	100.0%
		% within Emotional Competence category	.0%	12.9%	33.2%	58.2%	56.9%	39.0%
		% of Total	.0%	.9%	20.9%	10.6%	6.7%	39.0%
Total		Count	1	31	274	79	51	436
	% within Androgyny		.2%	7.1%	62.8%	18.1%	11.7%	100.0%
	% within Emotional Competence category		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total		.2%	7.1%	62.8%	18.1%	11.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.493(a)	4	.000
Likelihood Ratio	33.820	4	.000
Linear-by-Linear Association	28.019	1	.000
N of Valid Cases	436		

a 2 cells (20.0%) have expected count less than 5. The minimum expected count is .39.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.263			.000
Ordinal by Ordinal	Kendall's tau-b	.254	.042	5.807	.000
N of Valid Cases		436			

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Partial Corr: OUTPUT: 46, HYPOTHESIS: 63.2

Correlations

Control Variables			Androgyny	Emotional Competence
Mental Health & Self-Actualization & Locus of Control category & Internal Locus of Control & Personal Values	Androgyny	Correlation	1.000	.079
		Significance (2-tailed)	.	.112
		df	0	404
	Emotional Competence	Correlation	.079	1.000
		Significance (2-tailed)	.112	.
		df	404	0

Partial Corr

Correlations

Control Variables			Androgyny	Emotional Competence
Mental Health	Androgyny	Correlation	1.000	.120
		Significance (2-tailed)	.	.012
		df	0	432
	Emotional Competence	Correlation	.120	1.000
		Significance (2-tailed)	.012	.
		df	432	0

Partial Corr

Correlations

Control Variables			Androgyny	Emotional Competence
Self-Actualization	Androgyny	Correlation	1.000	.188
		Significance (2-tailed)	.	.000
		df	0	430
	Emotional Competence	Correlation	.188	1.000
		Significance (2-tailed)	.000	.
		df	430	0

Partial Corr

Correlations

Control Variables			Androgyny	Emotional Competence
Locus of Control category	Androgyny	Correlation	1.000	.238
		Significance (2-tailed)	.	.000
		df	0	418
	Emotional Competence	Correlation	.238	1.000
		Significance (2-tailed)	.000	.
		df	418	0

Partial Corr

Correlations

Control Variables			Androgyny	Emotional Competence
Internal Locus of Control	Androgyny	Correlation	1.000	.236
		Significance (2-tailed)	.	.000
		df	0	414
	Emotional Competence	Correlation	.236	1.000
		Significance (2-tailed)	.000	.
		df	414	0

Partial Corr

Correlations

Control Variables			Androgyny	Emotional Competence
Personal Values	Androgyny	Correlation	1.000	.247
		Significance (2-tailed)	.	.000
		df	0	423
	Emotional Competence	Correlation	.247	1.000
		Significance (2-tailed)	.000	.
		df	423	0

Hypothesis – 63:

The null hypothesis that there is no significant correlation between Androgyny and Emotional Competence is rejected. (Output. 46, Hypothesis: 63) Eta correlation between Androgyny and the scores of EC was found to be positive and statistically significant (Output. 46, Hypothesis: 63)

Emotional Competence scores also yielded categorization of the Ss within any of the five categories, namely, Highly Incompetent, Incompetent Average, Competent and Highly Competent. The contingency co-efficient between Androgyny and Emotional Competence categories was also positive and statistically significant (Output. 46, Hypothesis: 63.1). As the results show, within the Emotional Competence category analysis, the Androgynous had significantly higher proportion in Competent (58.2%) and Highly Competent category (56.9%), if compared to the Non-Androgynous with 41.8% and 43.1% in Competent and Highly Competent category. Similarly, the Non-androgynous had maximum proportion in Incompetent (87.1%) and Average (66.8%) category of Emotional Competence. Thus, Androgyny facilitates Emotional Competence significantly.

Finally as the partial correlation results suggest, (Output. 46, Hypothesis 63.2), Androgyny and Emotional Competence are positively and significantly correlated when the effects of Mental Health, Self-actualization, Locus of Control, Internality of LOC and Personal Values are bracketed and controlled statistically. ANOVA results also supported that the Androgynous had significantly higher Emotional Competence than the other SRO. (Output. 2, Hypothesis: 10).

As Emotional Competence constitutes a positive aspect of Mental Health, it is quite logical that if Mental Health is positively and significantly correlated with Androgyny, then Emotional Competence also must be positively correlated with Androgyny. The results of present research empirically substantiate this logical conclusion.

Cross tabs: OUTPUT: 47, HYPOTHESIS: 64

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Self-Actualization * Androgyny	440	58.5%	312	41.5%	752	100.0%

Self-Actualization * Androgyny Cross tabulation

Count

		Androgyny		
		Non-androgynous	Androgynous	Total
Self-Actualization	109	1	0	1
	114	1	0	1
	118	1	0	1
	120	1	0	1
	126	1	0	1
	128	1	0	1
	130	1	0	1
	133	1	0	1
	134	1	0	1
	136	0	1	1
	138	1	1	2
	139	1	2	3
	140	1	0	1
	141	0	1	1
	142	4	0	4
	143	2	2	4
	144	2	0	2
	145	2	0	2
	146	0	2	2
	147	3	0	3
	148	5	0	5
	149	1	0	1
	150	5	1	6
	151	6	3	9
	152	1	0	1
	153	3	0	3
	154	4	2	6
	155	6	0	6
	156	1	4	5
	157	3	3	6

158	6	2	8
159	3	0	3
160	1	0	1
161	2	1	3
162	0	1	1
163	11	2	13
164	9	6	15
165	8	3	11
166	10	4	14
167	4	3	7
168	6	5	11
169	5	2	7
170	4	1	5
171	4	4	8
172	5	3	8
173	10	4	14
174	6	6	12
175	6	4	10
176	4	2	6
177	8	5	13
178	8	4	12
179	7	1	8
180	5	3	8
181	7	3	10
182	3	3	6
183	2	5	7
184	3	6	9
185	2	4	6
186	2	0	2
187	12	0	12
188	4	3	7
189	4	3	7
190	2	2	4
191	6	2	8
192	7	7	14
193	3	10	13
194	1	1	2
195	5	5	10
196	0	4	4
197	4	6	10
198	1	2	3
199	1	3	4
200	3	1	4
201	0	1	1
202	2	1	3
204	0	2	2
205	1	2	3

208	1	0	1
210	0	1	1
211	0	2	2
214	0	1	1
215	0	2	2
219	0	1	1
225	0	1	1
Total	**268**	**172**	**440**

Directional Measures

			Value
Nominal by Interval	Eta	Self-Actualization Dependent	.244
		Androgyny Dependent	.498

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.244	.043	5.277	.000(c)
Ordinal by Ordinal	Spearman Correlation	.237	.046	5.095	.000(c)
N of Valid Cases		440			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: 47, HYPOTHESIS: 64.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Androgyny * Self-Actualization Category	443	58.9%	309	41.1%	752	100.0%

Androgyny * Self-Actualization Category Cross tabulation

			Self-Actualization Category			Total
			Low	Medium	High	
Androgyny	Non-androgynous	Count	70	142	57	269
		% within Androgyny	26.0%	52.8%	21.2%	100.0%
		% within Self-Actualization Category	73.7%	62.6%	47.1%	60.7%
		% of Total	15.8%	32.1%	12.9%	60.7%
	Androgynous	Count	25	85	64	174
		% within Androgyny	14.4%	48.9%	36.8%	100.0%
		% within Self-Actualization Category	26.3%	37.4%	52.9%	39.3%
		% of Total	5.6%	19.2%	14.4%	39.3%
Total		Count	95	227	121	443
	% within Androgyny		21.4%	51.2%	27.3%	100.0%
	% within Self-Actualization Category		100.0%	100.0%	100.0%	100.0%
	% of Total		21.4%	51.2%	27.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.416(a)	2	.000
Likelihood Ratio	16.535	2	.000
Linear-by-Linear Association	16.165	1	.000
N of Valid Cases	443		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 37.31.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.189	.000
N of Valid Cases		443	

Partial Corr: OUTPUT: 47 HYPOTHESIS: 64.2

Correlations

Control Variables			Androgyny	Self-Actualization
MH & EC& LOC category & INT LOC & PV	Androgyny	Correlation	1.000	.183
		Significance (2-tailed)	.	.000
		df	0	404
	Self-Actualization	Correlation	.183	1.000
		Significance (2-tailed)	.000	.
		df	404	0

Partial Corr

Correlations

Control Variables			Androgyny	Self-Actualization
Mental Health	Androgyny	Correlation	1.000	.187
		Significance (2-tailed)	.	.000
		df	0	429
	Self-Actualization	Correlation	.187	1.000
		Significance (2-tailed)	.000	.
		df	429	0

Partial Corr

Correlations

Control Variables			Androgyny	Self-Actualization
Emotional Competence	Androgyny	Correlation	1.000	.189
		Significance (2-tailed)	.	.000
		df	0	430
	Self-Actualization	Correlation	.189	1.000
		Significance (2-tailed)	.000	.
		df	430	0

Partial Corr

Correlations

Control Variables			Androgyny	Self-Actualization
Locus of Control category	Androgyny	Correlation	1.000	.245
		Significance (2-tailed)	.	.000
		df	0	421
	Self-Actualization	Correlation	.245	1.000
		Significance (2-tailed)	.000	.
		df	421	0

Partial Corr

Correlations

Control Variables			Androgyny	Self-Actualization
Internal Locus of Control	Androgyny	Correlation	1.000	.249
		Significance (2-tailed)	.	.000
		df	0	417
	Self-Actualization	Correlation	.249	1.000
		Significance (2-tailed)	.000	.
		df	417	0

Partial Corr

Correlations

Control Variables			Androgyny	Self-Actualization
Personal Values	Androgyny	Correlation	1.000	.256
		Significance (2-tailed)	.	.000
		df	0	420
	Self-Actualization	Correlation	.256	1.000
		Significance (2-tailed)	.000	.
		df	420	0

Hypothesis – 64:

The null hypothesis that there is no significant correlation between Androgyny and Self-actualization is rejected. (Output. 47, Hypothesis: 64). That is, Androgyny and Self-actualization are positively and significantly correlated.

As Androgyny implies higher level of personality development, it was hypothesized that it must be correlated with Self-actualization, because Self-actualization also represents the highest level of personality development according to Maslow's 'Hierarchy of Needs' theory. As the results suggest, the Eta correlation between Androgyny and the scores of Self-actualization is positive and statistically significant. (Output. 47, Hypothesis: 64).

The Self-actualization scores were used to categorize the subjects as Low, Medium, and High on Self-actualization using the Norms of the Scale. Category-wise analysis shows that the contingency coefficient as a measure of correlation between Androgyny and Self-actualization was also positive and statistically

significant, (Output. 47, Hypothesis 64.2). As the table shows, the Androgynous had significantly higher proportion of Ss in 'High' category of Self-actualization (52.9%) within SEA category, while the Non-Androgynous had significantly higher proportion (73.7%) in 'Low' SEA category, within SEA category analysis. Thus the Non-Androgynous had higher proportion of Ss in Low and Medium category of Self-actualization in comparison with the Androgynous. Thus, Androgyny significantly facilitates Self-actualization of 'High' category.

Finally, the partial correlation between Androgyny and Self-actualization is also significant and positive when the effects of Mental Health, EC, LOC, Int. LOC, and PV are successively bracketed and statistically controlled. ANOVA results also yielded same conclusion. (Output. 15, Hypothesis: 19) The Androgynous SRO had significantly higher SEA scores than all the three other SRO. (Output. 15, Hypothesis: 19)

Cross tabs: OUTPUT: 48, HYPOTHESIS: 65

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Androgyny * Locus of Control category	428	56.9%	324	43.1%	752	100.0%

Androgyny * Locus of Control category Cross tabulation

			Locus of Control category		Total
			External	Internal	
Androgyny	Non-androgynous	Count	45	213	258
		% within Androgyny	17.4%	82.6%	100.0%
		% within Locus of Control category	63.4%	59.7%	60.3%
		% of Total	10.5%	49.8%	60.3%
	Androgynous	Count	26	144	170
		% within Androgyny	15.3%	84.7%	100.0%
		% within Locus of Control category	36.6%	40.3%	39.7%
		% of Total	6.1%	33.6%	39.7%
Total		Count	71	357	428
	% within Androgyny		16.6%	83.4%	100.0%
	% within Locus of Control category		100.0%	100.0%	100.0%
	% of Total		16.6%	83.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.342(b)	1	.559		
Continuity Correction(a)	.204	1	.651		
Likelihood Ratio	.344	1	.557		
Fisher's Exact Test				.597	.328
Linear-by-Linear Association	.341	1	.559		
N of Valid Cases	428				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 28.20.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.028			.559
Interval by Interval	Pearson's R	.028	.048	.583	.560(c)
Ordinal by Ordinal	Spearman Correlation	.028	.048	.583	.560(c)
N of Valid Cases		428			

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

c Based on normal approximation.

Partial Corr: OUTPUT: 48, HYPOTHESIS: 65.1

Correlations

Control Variables			Androgyny	Locus of Control category
Mental Health & Self-Actualization & Emotional Competence & Personal Values	Androgyny	Correlation	1.000	-.021
		Significance (2-tailed)	.	.678
		Df	0	408
	Locus of Control category	Correlation	-.021	1.000
		Significance (2-tailed)	.678	.
		df	408	0

Partial Corr

Correlations

Control Variables			Androgyny	Locus of Control category
Mental Health	Androgyny	Correlation	1.000	-.004
		Significance (2-tailed)	.	.933
		df	0	418
	Locus of Control category	Correlation	-.004	1.000
		Significance (2-tailed)	.933	.
		df	418	0

Partial Corr

Correlations

Control Variables			Androgyny	Locus of Control category
Self-Actualization	Androgyny	Correlation	1.000	.004
		Significance (2-tailed)	.	.933
		df	0	421
	Locus of Control category	Correlation	.004	1.000
		Significance (2-tailed)	.933	.
		df	421	0

Partial Corr

Correlations

Control Variables			Androgyny	Locus of Control category
Emotional Competence	Androgyny	Correlation	1.000	-.004
		Significance (2-tailed)	.	.930
		df	0	418
	Locus of Control category	Correlation	-.004	1.000
		Significance (2-tailed)	.930	.
		df	418	0

Partial Corr

Correlations

Control Variables			Androgyny	Locus of Control category
Personal Values	Androgyny	Correlation	1.000	.027
		Significance (2-tailed)	.	.588
		df	0	415
	Locus of Control category	Correlation	.027	1.000
		Significance (2-tailed)	.588	.
		df	415	0

Hypothesis – 65:

The null hypothesis that Androgyny is not correlated with Locus of Control is accepted. (Output. 48, Hypothesis: 65). As the results show, the Androgynous, and the non-androgynous, both had significantly higher proportion of internal controls. Thus Androgyny is not found to be correlated with LOC.

The Partial correlations of Androgyny and Locus of Control were also found to be statistically non-significant even when the effects of Mental Health, Emotional Competence, Self-actualization, and Personal Values are bracketed and controlled statistically.

Cross tabs: OUTPUT: 48, HYPOTHESIS: 66

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Internal Locus of Control * Androgyny	424	56.4%	328	43.6%	752	100.0%

Internal Locus of Control * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Internal Locus of Control	4	0	1	1
	5	3	1	4
	6	1	1	2
	7	2	0	2
	8	9	2	11
	9	11	4	15
	10	7	9	16
	11	16	9	25
	12	39	13	52
	13	16	25	41
	14	24	23	47
	15	28	14	42
	16	22	17	39
	17	20	10	30
	18	14	12	26
	19	13	9	22
	20	14	13	27
	21	13	5	18
	22	4	0	4
Total		256	168	424

Directional Measures

			Value
Nominal by Interval	Eta	Internal Locus of Control Dependent	.020
		Androgyny Dependent	.262

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.020	.048	.403	.687(c)
Ordinal by Ordinal	Spearman Correlation	.023	.048	.466	.641(c)
N of Valid Cases		424			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Partial Corr: OUTPUT: 48, HYPOTHESIS: 66.1

Correlations

Control Variables			Androgyny	Internal Locus of Control
Mental Health & Self-Actualization & Emotional Competence & Personal Values	Androgyny	Correlation	1.000	-.036
		Significance (2-tailed)	.	.471
		df	0	405
	Internal Locus of Control	Correlation	-.036	1.000
		Significance (2-tailed)	.471	.
		df	405	0

Partial Corr

Correlations

Control Variables			Androgyny	Internal Locus of Control
Mental Health	Androgyny	Correlation	1.000	-.008
		Significance (2-tailed)	.	.870
		df	0	414
	Internal Locus of Control	Correlation	-.008	1.000
		Significance (2-tailed)	.870	.
		df	414	0

Partial Corr

Correlations

Control Variables			Androgyny	Internal Locus of Control
Self-Actualization	Androgyny	Correlation	1.000	-.002
		Significance (2-tailed)	.	.970
		df	0	417
	Internal Locus of Control	Correlation	-.002	1.000
		Significance (2-tailed)	.970	.
		df	417	0

Partial Corr

Correlations

Control Variables			Androgyny	Internal Locus of Control
Emotional Competence	Androgyny	Correlation	1.000	-.024
		Significance (2-tailed)	.	.623
		df	0	414
	Internal Locus of Control	Correlation	-.024	1.000
		Significance (2-tailed)	.623	.
		df	414	0

Partial Corr

Correlations

Control Variables			Androgyny	Internal Locus of Control
Personal Values	Androgyny	Correlation	1.000	.028
		Significance (2-tailed)	.	.563
		df	0	412
	Internal Locus of Control	Correlation	.028	1.000
		Significance (2-tailed)	.563	.
		df	412	0

Hypothesis – 66:

The null hypothesis that there is no significant correlation between Androgyny and the Internality of LOC is accepted. (Output. 48, Hypothesis: 66). Thus, as stated earlier, majority (more than 80%) of the Ss studied in present research were found to be internal controls. So, it was more meaningful to analyze the Internality of LOC while comparing various groups. The Eta-Correlation between the Internality LOC scores and the Androgyny was found to be statistically non-significant. Not only that but using the method of statistical control through partial correlation also, it was found that none of the partial correlations between Androgyny and Internality of LOC was found to be significant when the effects of other relevant personality variables like MH, EC, SEA and PV were statistically controlled successively. (Output. 48, Hypothesis 66.1).

Thus, neither Locus of Control nor the Internality of LOC was found to the correlated with Androgyny. ANOVA results also

supported the same conclusion. SRO had no significant effect on Internality of Locus of Control. (Output. 22, Hypothesis: 29).

Cross tabs: OUTPUT: 49, HYPOTHESIS: 67

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Androgyny * Personal Values	427	56.8%	325	43.2%	752	100.0%

Androgyny * Personal Values Cross tabulation

			Personal Values			Total
			Other	Religious	Aesthetic	
Androgyny	Non-androgynous	Count	132	63	65	260
		% within Androgyny	50.8%	24.2%	25.0%	100.0%
		% within Personal Values	59.7%	69.2%	56.5%	60.9%
		% of Total	30.9%	14.8%	15.2%	60.9%
	Androgynous	Count	89	28	50	167
		% within Androgyny	53.3%	16.8%	29.9%	100.0%
		% within Personal Values	40.3%	30.8%	43.5%	39.1%
		% of Total	20.8%	6.6%	11.7%	39.1%
Total		Count	221	91	115	427
	% within Androgyny		51.8%	21.3%	26.9%	100.0%
	% within Personal Values		100.0%	100.0%	100.0%	100.0%
	% of Total		51.8%	21.3%	26.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.705(a)	2	.157
Likelihood Ratio	3.778	2	.151
Linear-by-Linear Association	.082	1	.775
N of Valid Cases	427		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 35.59.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.093	.157
N of Valid Cases		427	

Cross tabs: OUTPUT: 49 HYPOTHESIS: 67.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Type of Person * Personal Values	430	57.2%	322	42.8%	752	100.0%

Type of Person * Personal Values Cross tabulation

			Personal Values			Total
			Other	Religious	Aesthetic	
Type of Person	Normals	Count	89	21	14	124
		% within Type of Person	71.8%	16.9%	11.3%	100.0%
		% within Personal Values	40.1%	22.8%	12.1%	28.8%
		% of Total	20.7%	4.9%	3.3%	28.8%
	Saints	Count	67	63	6	136
		% within Type of Person	49.3%	46.3%	4.4%	100.0%
		% within Personal Values	30.2%	68.5%	5.2%	31.6%
		% of Total	15.6%	14.7%	1.4%	31.6%
	Artists	Count	66	8	96	170
		% within Type of Person	38.8%	4.7%	56.5%	100.0%
		% within Personal Values	29.7%	8.7%	82.8%	39.5%
		% of Total	15.3%	1.9%	22.3%	39.5%
Total		Count	222	92	116	430
	% within Type of Person		51.6%	21.4%	27.0%	100.0%
	% within Personal Values		100.0%	100.0%	100.0%	100.0%
	% of Total		51.6%	21.4%	27.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	169.877(a)	4	.000
Likelihood Ratio	173.747	4	.000
Linear-by-Linear Association	64.405	1	.000
N of Valid Cases	430		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.53.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.532			.000
Interval by Interval	Pearson's R	.387	.045	8.695	.000(c)
Ordinal by Ordinal	Spearman Correlation	.369	.046	8.201	.000(c)
N of Valid Cases		430			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Hypothesis – 67:

The null hypothesis that there is no significant correlation between Androgyny and Personal Values is accepted. (Output. 49, Hypothesis: 67). Thus, the Ss with Aesthetic, Religious, and Other values do not differ significantly with respect to Androgyny.

As per Joan Erickson's hypothesis, saints and artists are Androgynous in comparison to normals. Joan Erikson's hypothesis got empirical support through Type of Person analysis. Type of person was significantly correlated with Sex-Role Orientation with

higher proportion of Androgynous Sex-Role Orientation in saints and artists as compared to normals. (Output. 29, Hypothesis 46). The

Androgyny- analysis with respect to Type of Person (Output. 41, Hypothesis 58) also supported Joan Erickson's hypothesis empirically with higher proportion of Androgynous in saints and artists in comparison with normals.

Now, if saints are assumed to have Religious and artists are assumed to have Aesthetic values then logically it can be derived on the basis of Joan's hypothesis that Ss with Religious & Aesthetic values must have higher Androgynous Sex-Role Orientation. Cross – tabulation of Sex-Role Orientation and Personal Values supported Joan's Hypothesis only partially in case of artists only, not in case of saints (Output. 36, Hypothesis: 53). The reason, as explained earlier, was that a person living religious values does not mean a saint. To check this proposition, researcher computed the correlation between Type of Person and Personal Values (Output. 49, Hypothesis 67.1). As the results show, Type of Person is significantly correlated with Personal Values. As the results show, majority of artists lived Aesthetic values, Similarly, maximum proportion of normals were found to have 'Other' values, while the saints were not found to have maximum proportion of Religious values. It was observed that many of saints were having 'democratic' value, i.e. other than the religious values. Especially Christian saints were found to have more democratic values, which constituted the 'Other' values. This was the reason why in Sex-Role Orientation analysis, Joan's hypothesis was only partially validated in case of Aesthetic values, not in case of religious values.

In short, 'Type of Person x Sex-Role Orientation' analysis (Output. 29) supported Joan's hypothesis. Joan's hypothesis got partial empirical support in 'Androgyny x Type of Person' analysis. But in 'Androgyny x Personal Values', Joan's hypothesis is rejected. Actually Joan's hypothesis is that saints and artists are androgynous persons. Thus, Joan's hypothesis is about the 'Type of Person', not about the Personal Values of Religious and Aesthetic values. On the basis of Joan's hypothesis about saints and artists, it was ***only*** logically conjectured that Religious and Aesthetic values also may be correlated with androgyny, and the empirical findings of present research do not support this logical corollary of Joan's hypothesis in case of Values.

To end, Androgyny is not significantly correlated with Personal Values.

Androgyny and Mental Health & Emotional Competence Components:

As Androgyny was found to be significantly correlated with Mental Health (Output. 45) and Emotional Competence (Output. 46), researcher attempted to analyze further, which of six components of Mental Health and which of the five components of EC was more significantly correlated with Androgyny So, now Androgyny is further analyzed with reference to six Mental Health components and five EC- components as under:

Androgyny and Mental Health Components:

The Mental Health, as measured here, had six components, namely Positive Self-Evaluation (PSE), Integration of Personality (IP), Perception of Reality (PR), Autonomy (AUT), Group-Oriented Attitude (GOA) and Environmental Mastery (EM). The correlations of androgyny with each of these six components are discussed as under:

Cross tabs: OUTPUT: 50, HYPOTHESIS: 68

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Positive Self-Evaluation * Androgyny	436	58.0%	316	42.0%	752	100.0%

Positive Self-Evaluation * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Positive Self-Evaluation	16	1	0	1
	17	0	1	1
	20	1	0	1
	21	4	1	5
	22	6	3	9
	23	2	3	5
	24	9	5	14
	25	11	0	11
	26	10	7	17
	27	15	11	26
	28	24	3	27
	29	19	10	29
	30	31	7	38
	31	27	10	37
	32	11	13	24
	33	27	14	41
	34	20	15	35
	35	18	18	36
	36	8	7	15
	37	10	13	23
	38	8	12	20
	39	2	10	12
	40	1	5	6
	44	0	2	2
	48	1	0	1
Total		**266**	**170**	**436**

Directional Measures

			Value
Nominal by Interval	Eta	Positive Self-Evaluation Dependent	.220
		Androgyny Dependent	.372

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.220	.047	4.705	.000(c)
Ordinal by Ordinal	Spearman Correlation	.234	.047	5.019	.000(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Hypothesis –68:

The null hypothesis that there is no significant correlation between Androgyny and Positive Self-evaluation is rejected (Output. 5, Hypothesis: 68). That is, Androgyny and Positive Self-evaluation are positively correlated.

A number of studies, as discussed in Review of Literature, had shown that Androgyny and self-esteem are positively correlated. Self-esteem underlies positive self-evaluation. So Positive Self-evaluation is also found to be positively correlated with Androgyny. PSE as measured here included self-confidence, self-acceptance, self-esteem, feeling of worthiness, and realization of one's potentialities etc- all of these are positively correlated with Androgyny. Thus, the MHI used here implied realization of one's potentials as a part of Positive Self-evaluation (Manual for MHI, P.3). Therefore PSE must be positively correlated with self-actualization. The results support this prediction too. (Output. 51, Hypothesis: 68.1)

Cross tabs: OUTPUT: 51 HYPOTHESIS: 69

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Perception of Reality * Androgyny	436	58.0%	316	42.0%	752	100.0%

Perception of Reality * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Perception of Reality	14	2	0	2
	15	1	0	1
	16	1	1	2
	17	4	2	6
	18	4	2	6
	19	6	1	7
	20	8	5	13
	21	14	7	21
	22	25	6	31
	23	24	14	38
	24	39	13	52
	25	29	16	45
	26	27	17	44
	27	22	15	37
	28	18	21	39
	29	18	20	38
	30	13	18	31
	31	6	6	12
	32	3	3	6
	34	1	0	1
	38	1	0	1
	42	0	1	1
	43	0	1	1
	47	0	1	1
Total		**266**	**170**	**436**

Directional Measures

			Value
Nominal by Interval	Eta	Perception of Reality Dependent	.202
		Androgyny Dependent	.271

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.202	.045	4.291	.000(c)
Ordinal by Ordinal	Spearman Correlation	.205	.047	4.366	.000(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: 52 HYPOTHESIS: 70

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Integration of Personality * Androgyny	436	58.0%	316	42.0%	752	100.0%

Integration of Personality * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Integration of Personality	19	2	0	2
	20	2	0	2
	22	1	0	1
	23	3	0	3
	24	2	1	3
	25	2	1	3
	26	3	2	5
	27	5	1	6
	28	7	2	9
	29	10	1	11
	30	11	2	13
	31	8	5	13
	32	9	7	16
	33	16	4	20
	34	19	16	35
	35	22	19	41
	36	26	12	38
	37	28	15	43
	38	20	14	34
	39	9	19	28
	40	12	9	21
	41	15	11	26
	42	6	12	18
	43	6	7	13
	44	10	3	13
	45	5	2	7
	46	4	1	5
	47	1	2	3
	48	1	1	2
	51	1	0	1
	55	0	1	1
Total		**266**	**170**	**436**

Directional Measures

			Value
Nominal by Interval	Eta	Integration of Personality Dependent	.158
		Androgyny Dependent	.316

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.158	.044	3.344	.001(c)
Ordinal by Ordinal	Spearman Correlation	.152	.046	3.211	.001(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: 53, HYPOTHESIS: 71

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Autonomy * Androgyny	436	58.0%	316	42.0%	752	100.0%

Autonomy * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Autonomy	9	0	1	1
	10	1	0	1
	11	4	0	4
	12	5	0	5
	13	6	4	10
	14	13	5	18
	15	26	5	31
	16	21	11	32
	17	41	22	63
	18	53	24	77
	19	26	26	52
	20	23	23	46
	21	17	14	31
	22	7	12	19
	23	8	13	21
	24	10	5	15
	26	3	2	5
	30	0	1	1
	33	0	1	1
	35	1	0	1
	36	0	1	1
	40	1	0	1
Total		266	170	436

Directional Measures

			Value
Nominal by Interval	Eta	Autonomy Dependent	.174
		Androgyny Dependent	.301

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.174	.048	3.672	.000(c)
Ordinal by Ordinal	Spearman Correlation	.205	.046	4.363	.000(c)
N of Valid Cases		436			

Correlations: OUTPUT: 53 HYPOTHESIS: 71.1

Descriptive Statistics

	Mean	Std. Deviation	N
Autonomy	18.49	3.416	439
Internal Locus of Control	14.56	3.622	426

Correlations

		Autonomy	Internal Locus of Control
Autonomy	Pearson Correlation	1	.064
	Sig. (2-tailed)		.190
	N	439	419
Internal Locus of Control	Pearson Correlation	.064	1
	Sig. (2-tailed)	.190	
	N	419	426

Cross tabs: OUTPUT: 54 HYPOTHESIS: 72

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Group-Oriented Attitude * Androgyny	436	58.0%	316	42.0%	752	100.0%

Group-Oriented Attitude * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Group-Oriented Attitude	14	1	0	1
	20	2	2	4
	21	3	0	3
	22	1	1	2
	23	11	0	11
	24	7	1	8
	25	4	2	6
	26	11	6	17
	27	9	12	21
	28	16	7	23
	29	26	8	34
	30	22	12	34
	31	18	13	31
	32	22	18	40
	33	20	9	29
	34	23	18	41
	35	20	13	33
	36	24	10	34
	37	15	11	26
	38	6	16	22
	39	2	6	8
	40	2	4	6
	41	1	1	2
Total		266	170	436

Directional Measures

			Value
Nominal by Interval	Eta	Group-Oriented Attitude Dependent	.163
		Androgyny Dependent	.303

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.163	.046	3.449	.001(c)
Ordinal by Ordinal	Spearman Correlation	.153	.047	3.234	.001(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: 55 HYPOTHESIS: 73

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Environmental Mastery * Androgyny	436	58.0%	316	42.0%	752	100.0%

Environmental Mastery * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Environmental Mastery	15	0	1	1
	16	1	0	1
	18	1	0	1
	19	0	1	1
	20	2	1	3
	21	1	0	1
	22	7	1	8
	23	8	0	8
	24	9	7	16
	25	11	2	13
	26	17	10	27
	27	15	9	24
	28	21	16	37
	29	31	13	44
	30	19	17	36
	31	28	17	45
	32	32	16	48
	33	23	8	31
	34	17	12	29
	35	4	13	17
	36	12	8	20
	37	4	3	7
	38	3	6	9
	39	0	5	5
	40	0	3	3
	44	0	1	1
Total		266	170	436

Directional Measures

			Value
Nominal by Interval	Eta	Environmental Mastery Dependent	.165
		Androgyny Dependent	.335

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.165	.047	3.488	.001(c)
Ordinal by Ordinal	Spearman Correlation	.145	.048	3.056	.002(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Hypothesis – 69:

The null hypothesis that there is no significant correlation between Androgyny and Perception of Reality is rejected (Output. 51, Hypothesis: 69). The eta-correlation between Androgyny and the scores of Perception of Reality was found to be positive and statistically significant. Thus, Androgyny facilitates reality-orientation.

Hypothesis – 70:

The null hypothesis that there is no significant correlation between Integration of Personality and Androgyny is rejected (Output. 52, Hypothesis: 70). Androgyny itself is the outcome of integration of Anima & Animals within one's own self. So, significant positive correlation between Androgyny and Integration of Personality is quite natural.

Hypothesis – 71:

The null hypothesis that there is no significant correlation between Androgyny and Autonomy is also rejected (Output. 53, Hypothesis: 71). Thus Androgyny and Autonomy are positively correlated and the eta-correlation between the two is significant. Autonomy, as measured here, implied the stable, internal standards for one's actions, dependence for one's own development upon one's own potentialities rather than dependence on others. (Manual for MHI: 3-4). Thus, because Autonomy implies dependence on interval standards, it can be hypothesized that Autonomy must be positively correlated with internality of LOC. However, the results do not support this logical derivation (Output. 53, Hypothesis: 71.1). The correlation between Autonomy and Internality of LOC was positive, but not statistically significant.

Hypothesis – 72:

The null hypothesis that there is no significant correlation between Androgyny and Group oriented Attitude is rejected (Output. 54, Hypothesis: 72). That is, Group-oriented Attitude and Androgyny are positively correlated. GOA implied one's ability to get along with others, ability to work with others. Androgyny and ability to cope with others were significantly correlated.

Hypothesis – 73:

The null hypothesis that there is no significant correlation between Androgyny and Environmental Mastery is rejected

(Output. 55, Hypothesis: 73) Environmental Mastery included Efficiency in meeting situational requirements, ability to work and play, ability to take responsibility and capacity for adjustment. (Manual for MHI: 4) Androgyny was found to be significantly and positively correlated with Environmental Mastery.

Thus, Androgyny was found to be positively correlated with all the six components of Mental Health and hence its correlation with Mental Health was also found to be positive and significant. The amount of correlation was almost same for all the components.

Androgyny Analysis and Components of Emotional Competence:

Emotional Competence, as measured here, had five components; namely, Adequate Depth of Feeling (ADF), Adequate Expression and Control of Emotions (AECE), Ability to Function with Emotions (AFE), Ability to Cope with Problem Emotions (ACPE) and Encouragement of Positive Emotions (EPE). For detailed comparison, the correlations of Androgyny with each of these five components of EC were compared and are discussed as under:

Cross tabs: OUTPUT: 56 HYPOTHESIS: 74

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Adequate Depth of Perception * Androgyny	436	58.0%	316	42.0%	752	100.0%

Adequate Depth of Perception * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Adequate Depth of Perception	29	1	0	1
	31	0	3	3
	33	4	2	6
	35	2	1	3
	37	7	2	9
	39	9	1	10
	42	5	3	8
	44	13	7	20
	47	14	4	18
	48	14	11	25
	50	22	11	33
	52	19	12	31
	54	29	18	47
	56	19	18	37
	58	31	10	41
	60	14	12	26
	63	15	11	26
	64	1	0	1
	65	13	5	18
	67	9	7	16
	69	12	7	19
	71	3	9	12
	73	3	4	7
	75	2	6	8
	77	1	2	3
	79	4	4	8
Total		**266**	**170**	**436**

Directional Measures

			Value
Nominal by Interval	Eta	Adequate Depth of Perception Dependent	.120
		Androgyny Dependent	.279

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.120	.048	2.515	.012(c)
Ordinal by Ordinal	Spearman Correlation	.113	.048	2.364	.019(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: 57 HYPOTHESIS: 75

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Adequate Expressions & Control of Emotions * Androgyny	436	58.0%	316	42.0%	752	100.0%

Adequate Expressions & Control of Emotions * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Adequate Expressions & Control of Emotions	33	1	1	2
	35	4	0	4
	37	6	0	6
	39	5	0	5
	41	11	6	17
	44	9	2	11
	46	11	5	16
	48	13	4	17
	50	20	8	28
	52	36	10	46
	54	38	28	66
	56	36	21	57
	58	26	13	39
	60	17	22	39
	62	7	15	22
	63	8	13	21
	65	0	1	1
	66	5	11	16
	67	1	0	1
	68	4	4	8
	69	1	0	1
	70	5	2	7
	71	0	1	1
	72	2	0	2
	74	0	2	2
	79	0	1	1
Total		**266**	**170**	**436**

Directional Measures

			Value
Nominal by Interval	Eta	Adequate Expressions & Control of Emotions Dependent	.243
		Androgyny Dependent	.360

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.243	.044	5.230	.000(c)
Ordinal by Ordinal	Spearman Correlation	.257	.045	5.539	.000(c)
N of Valid Cases		436			

Cross tabs OUTPUT: 58 HYPOTHESIS: 76

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Ability to Function with Emotions * Androgyny	436	58.0%	316	42.0%	752	100.0%

Ability to Function with Emotions * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Ability to Function with Emotions	27	1	0	1
	33	2	0	2
	35	2	1	3
	37	6	1	7
	39	8	0	8
	41	6	2	8
	43	13	2	15
	45	14	3	17
	47	11	9	20
	49	22	12	34
	51	16	8	24
	53	24	9	33
	55	26	14	40
	57	36	14	50
	58	1	0	1
	59	16	18	34
	61	25	24	49
	62	1	0	1
	63	10	14	24
	64	0	1	1
	65	8	16	24
	67	11	7	18
	69	3	9	12
	71	3	1	4
	74	1	5	6
Total		**266**	**170**	**436**

Directional Measures

			Value
Nominal by Interval	Eta	Ability to Function with Emotions Dependent	.263
		Androgyny Dependent	.350

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.263	.043	5.671	.000(c)
Ordinal by Ordinal	Spearman Correlation	.261	.045	5.643	.000(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: 59 HYPOTHESIS: 77

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Ability to Cope with Problem Emotions * Androgyny	436	58.0%	316	42.0%	752	100.0%

Ability to Cope with Problem Emotions * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Ability to Cope with Problem Emotions	12	0	1	1
	33	3	1	4
	34	4	0	4
	37	1	1	2
	39	2	2	4
	41	4	0	4
	43	8	4	12
	45	6	1	7
	46	1	0	1
	47	8	5	13
	49	15	7	22
	50	19	7	26
	51	0	1	1
	52	23	11	34
	53	2	1	3
	54	21	9	30
	55	1	1	2
	56	27	12	39
	57	0	1	1
	58	26	13	39
	59	1	0	1
	60	27	18	45
	62	22	17	39
	63	0	2	2
	64	18	20	38
	65	0	2	2
	66	16	9	25
	68	5	11	16
	70	4	8	12
	72	2	4	6
	74	0	1	1
Total		**266**	**170**	**436**

Directional Measures

			Value
Nominal by Interval	Eta	Ability to Cope with Problem Emotions Dependent	.177
		Androgyny Dependent	.311

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.177	.049	3.740	.000(c)
Ordinal by Ordinal	Spearman Correlation	.197	.047	4.182	.000(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: 60 HYPOTHESIS: 78

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Encouragement of Positive Emotions * Androgyny	436	58.0%	316	42.0%	752	100.0%

Encouragement of Positive Emotions * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Encouragement of Positive Emotions	26	1	0	1
	28	1	0	1
	31	3	0	3
	37	2	1	3
	38	3	1	4
	39	5	5	10
	43	10	4	14
	44	4	2	6
	46	12	4	16
	47	1	0	1
	48	17	7	24
	50	21	9	30
	51	1	0	1
	52	18	11	29
	54	22	12	34
	56	22	12	34
	58	28	16	44
	60	1	1	2
	61	29	19	48
	62	1	1	2
	63	17	14	31
	65	18	20	38
	67	14	9	23
	68	1	1	2
	69	6	7	13
	71	4	8	12
	73	4	6	10
Total		**266**	**170**	**436**

Directional Measures

			Value
Nominal by Interval	Eta	Encouragement of Positive Emotions Dependent	.166
		Androgyny Dependent	.217

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.166	.046	3.514	.000(c)
Ordinal by Ordinal	Spearman Correlation	.167	.047	3.519	.000(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: 60 HYPOTHESIS: 63 (extra)

Emotional Competence * Androgyny Cross tabulation

Count

		Androgyny		Total
		Non-androgynous	Androgynous	
Emotional Competence	174	1	0	1
	186	1	0	1
	191	1	0	1
	194	2	0	2
	197	1	0	1
	198	1	0	1
	204	1	0	1
	205	1	0	1
	206	2	0	2
	208	2	0	2
	212	1	0	1
	213	2	2	4
	215	1	0	1
	216	2	0	2
	219	2	0	2
	220	2	1	3
	221	2	0	2
	222	0	1	1
	223	3	0	3
	224	1	0	1
	225	0	1	1
	228	0	2	2
	229	1	1	2
	230	3	0	3
	231	2	1	3
	232	3	0	3
	233	0	1	1
	234	1	1	2
	236	1	0	1
	237	3	0	3
	238	1	0	1
	239	1	0	1
	241	2	0	2
	242	0	1	1
	243	1	1	2
	244	0	2	2
	245	4	0	4
	248	1	1	2

249	2	0	2
250	3	2	5
251	0	2	2
252	3	0	3
253	3	1	4
254	1	3	4
255	3	1	4
256	2	1	3
257	1	3	4
259	1	1	2
261	6	1	7
262	1	0	1
263	3	2	5
264	2	1	3
265	5	2	7
266	4	0	4
267	4	0	4
268	3	2	5
269	5	7	12
270	1	1	2
271	7	2	9
272	4	1	5
273	10	1	11
274	4	1	5
275	3	0	3
276	2	0	2
277	2	0	2
278	4	2	6
279	5	3	8
280	3	2	5
281	6	2	8
282	3	2	5
283	2	1	3
284	6	3	9
285	4	0	4
286	2	6	8
287	2	2	4
288	5	1	6
289	5	3	8
290	5	1	6
292	4	2	6
293	3	3	6
294	4	4	8
295	4	1	5
296	1	2	3
297	2	0	2

298	4	4	8
299	1	0	1
300	7	7	14
301	2	1	3
302	1	7	8
303	0	3	3
304	5	3	8
305	2	3	5
306	4	5	9
307	0	1	1
308	0	1	1
309	3	3	6
310	3	1	4
311	0	2	2
312	2	1	3
313	1	4	5
314	0	4	4
316	1	3	4
317	2	1	3
318	2	1	3
319	0	1	1
320	1	1	2
321	2	1	3
322	1	3	4
325	1	1	2
326	2	0	2
327	0	1	1
328	2	1	3
329	1	0	1
330	2	3	5
331	1	0	1
332	1	0	1
333	1	1	2
334	0	1	1
335	0	2	2
336	1	0	1
337	0	2	2
339	0	1	1
345	0	1	1
346	0	1	1
349	1	0	1
353	1	1	2
358	0	2	2
Total	266	170	436

Directional Measures

			Value
Nominal by Interval	Eta	Emotional Competence Dependent	.250
		Androgyny Dependent	.586

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.250	.043	5.373	.000(c)
Ordinal by Ordinal	Spearman Correlation	.251	.046	5.412	.000(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Hypothesis – 74:

The null hypothesis that there is no significant correlation between Androgyny and Adequate Depth of Feeling (ADF) is rejected. The eta-correlation between Androgyny and the scores of ADF was found to be positive and statistically significant. ADF as defined in the Manual for the EC scale, is specifically associated with effective judgment and personality integration (Manual for the scale of EC: 3) Thus ADF characterizes personality integration as does Androgyny. So, it is quite consistent that the correlation between Androgyny and ADF be positive and significant.

Hypothesis – 75:

The null hypothesis that there is no significant correlation between Androgyny and Adequate Expression and Control of Emotions (AECE) (Output. 57, Hypothesis: 75) is rejected. That is, the correlation between Androgyny and AEC is positive and significant.

Hypothesis – 76:

The null hypothesis that there is no significant correlation between Androgyny and Ability to Function with Emotions (AFE) is rejected. (Output. 58, Hypothesis: 76). That is the correlation between Androgyny and AFE is positive and statistically significant.

Hypothesis – 77:

The null hypothesis that there is no significant correlation between Androgyny and Ability to Cope with Problem Emotions (ACPE) is rejected (Output. 59, Hypothesis 77). That is, the eta-correlation between Androgyny and ACPE is positive and statistically significant.

Hypothesis - 78:

The null hypothesis that there is no significant correlation between Androgyny is and Encouragement of Positive Emotions (EPE) is rejected (Output. 60, Hypothesis: 78). That is, the correlation between Androgyny and EPE is positive and statistically significant.

In this way, Androgyny is found to be positively correlated with each of five components of EC almost equally and hence it is positively correlated with EC in general too (Output. 60, Hypothesis: 63 extra).

4. Concomitant Correlational Analysis:

Though present research focuses on the personality correlates of Androgyny, all of which are discussed hitherto, here some other correlations, among various personality variables other than Androgyny are also discussed in brief as under:

Concomitant Correlational Analysis: Part-1. Value Analysis:

Personal values, categorized on the basis of extended, Spranger's classification, have been already discussed with reference to Sex-Role Orientation and Androgyny in particular. But the correlations of personal values with other personality variables can briefly be discussed as follows:

Cross tabs OUTPUT: 61 HYPOTHESIS: 79

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Personal Values * Type of Person	430	57.2%	322	42.8%	752	100.0%

Personal Values * Type of Person Cross tabulation

			Type of Person			Total
			Normals	Saints	Artists	
Personal Values	Other	Count	89	67	66	222
		% within Personal Values	40.1%	30.2%	29.7%	100.0%
		% within Type of Person	71.8%	49.3%	38.8%	51.6%
		% of Total	20.7%	15.6%	15.3%	51.6%
	Religious	Count	21	63	8	92
		% within Personal Values	22.8%	68.5%	8.7%	100.0%
		% within Type of Person	16.9%	46.3%	4.7%	21.4%
		% of Total	4.9%	14.7%	1.9%	21.4%
	Aesthetic	Count	14	6	96	116
		% within Personal Values	12.1%	5.2%	82.8%	100.0%
		% within Type of Person	11.3%	4.4%	56.5%	27.0%
		% of Total	3.3%	1.4%	22.3%	27.0%
Total		Count	124	136	170	430
	% within Personal Values		28.8%	31.6%	39.5%	100.0%
	% within Type of Person		100.0%	100.0%	100.0%	100.0%
	% of Total		28.8%	31.6%	39.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	169.877(a)	4	.000
Likelihood Ratio	173.747	4	.000
Linear-by-Linear Association	64.405	1	.000
N of Valid Cases	430		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.53.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.532	.000
N of Valid Cases		430	

Cross tabs: Output: 62, Hypothesis: 80

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Type of Religion * Personal Values	136	18.1%	616	81.9%	752	100.0%

Type of Religion * Personal Values Cross tabulation

			Personal Values			Total
			Other	Religious	Aesthetic	
Type of Religion	Hinduism	Count	7	37	1	45
		% within Type of Religion	15.6%	82.2%	2.2%	100.0%
		% within Personal Values	10.4%	58.7%	16.7%	33.1%
		% of Total	5.1%	27.2%	.7%	33.1%
	Christianity	Count	41	12	5	58
		% within Type of Religion	70.7%	20.7%	8.6%	100.0%
		% within Personal Values	61.2%	19.0%	83.3%	42.6%
		% of Total	30.1%	8.8%	3.7%	42.6%
	Jainism	Count	19	14	0	33
		% within Type of Religion	57.6%	42.4%	.0%	100.0%
		% within Personal Values	28.4%	22.2%	.0%	24.3%
		% of Total	14.0%	10.3%	.0%	24.3%
Total		Count	67	63	6	136
	% within Type of Religion		49.3%	46.3%	4.4%	100.0%
	% within Personal Values		100.0%	100.0%	100.0%	100.0%
	% of Total		49.3%	46.3%	4.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	41.375(a)	4	.000
Likelihood Ratio	45.375	4	.000
Linear-by-Linear Association	12.991	1	.000
N of Valid Cases	136		

a 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.46.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.483			.000
Interval by Interval	Pearson's R	-.310	.070	-3.777	.000(c)
Ordinal by Ordinal	Spearman Correlation	-.344	.076	-4.235	.000(c)
N of Valid Cases		136			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Hypothesis - 79:

The null hypothesis that there is no significant correlation between Type of Person and Personal Values is rejected. (Output, 61, Hypothesis: 79). That is, saints, artists, and normals differ significantly with respect to Personal Values.

As the results show, artists do have maximum proportion in Aesthetic values and Normals do have maximum proportion in 'Other' values as discussed earlier (Output. 49, Hypothesis: 67). But saints do not have maximum proportion in Religious values. It is because of this fact that only that the logical corollary of Joan's Hypothesis about Androgyny among Religious and Aesthetic values was only partially supported as discussed earlier. (Discussion on Hypothesis: 53 & 67).

Hypothesis – 80:

The null hypothesis that there are no significant differences in the Personal Values of saints with different Religions is rejected

(Output. 62, Hypothesis: 80). Thus, saints of different religions differ significantly with respect to Personal Values.

As the results show, religious values are found maximum in Hinduism and minimum in Christianity within the Type of Religion and also within the Personal Values. While 'Other' values are found maximum in Christianity and minimum in Hinduism within the Type of Religion and within the Personal Values. Among the Christian saints only, maximum saints (70.7 %) were found to have 'Other' (especially democratic) values. It is because of this prominence of 'Other' values among Christian Saints that the logical corollary of Joan's Hypothesis got empirical support only in case of Aesthetic values, and not in case of Religious values, as discussed earlier. (Discussion on Hypothesis: 53 & 67)

Cross tabs: OUTPUT: 63 HYPOTHESIS: 81

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Personal Values * Type of Art	170	22.6%	582	77.4%	752	100.0%

Personal Values * Type of Art Cross tabulation

			Type of Art			Total
			Dance & Drama	Music	Painting	
Personal Values	Other	Count	16	28	22	66
		% within Personal Values	24.2%	42.4%	33.3%	100.0%
		% within Type of Art	31.4%	47.5%	36.7%	38.8%
		% of Total	9.4%	16.5%	12.9%	38.8%
	Religious	Count	2	3	3	8
		% within Personal Values	25.0%	37.5%	37.5%	100.0%
		% within Type of Art	3.9%	5.1%	5.0%	4.7%
		% of Total	1.2%	1.8%	1.8%	4.7%
	Aesthetic	Count	33	28	35	96
		% within Personal Values	34.4%	29.2%	36.5%	100.0%
		% within Type of Art	64.7%	47.5%	58.3%	56.5%
		% of Total	19.4%	16.5%	20.6%	56.5%
Total		Count	51	59	60	170
	% within Personal Values		30.0%	34.7%	35.3%	100.0%
	% within Type of Art		100.0%	100.0%	100.0%	100.0%
	% of Total		30.0%	34.7%	35.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.528(a)	4	.474
Likelihood Ratio	3.530	4	.473
Linear-by-Linear Association	.305	1	.581
N of Valid Cases	170		

a 3 cells (33.3%) have expected count less than 5. The minimum expected count is 2.40.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.143	.474
N of Valid Cases		170	

Cross tabs: OUTPUT: 64 HYPOTHESIS: 82

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Personal Values * Age	354	47.1%	398	52.9%	752	100.0%

Personal Values * Age Cross tabulation

			Age			Total
			1-25	26-50	51-75	
Personal Values	Other	Count	93	72	25	190
		% within Personal Values	48.9%	37.9%	13.2%	100.0%
		% within Age	58.9%	51.4%	44.6%	53.7%
		% of Total	26.3%	20.3%	7.1%	53.7%
	Religious	Count	16	26	8	50
		% within Personal Values	32.0%	52.0%	16.0%	100.0%
		% within Age	10.1%	18.6%	14.3%	14.1%
		% of Total	4.5%	7.3%	2.3%	14.1%
	Aesthetic	Count	49	42	23	114
		% within Personal Values	43.0%	36.8%	20.2%	100.0%
		% within Age	31.0%	30.0%	41.1%	32.2%
		% of Total	13.8%	11.9%	6.5%	32.2%
Total		Count	158	140	56	354
	% within Personal Values		44.6%	39.5%	15.8%	100.0%
	% within Age		100.0%	100.0%	100.0%	100.0%
	% of Total		44.6%	39.5%	15.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.172(a)	4	.127
Likelihood Ratio	7.116	4	.130
Linear-by-Linear Association	2.686	1	.101
N of Valid Cases	354		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.91.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.141	.127
N of Valid Cases		354	

Hypothesis – 81:

The null hypothesis that there are no significant differences in the Personal Values of artists with different Types of art is accepted. (Output. 63, Hypothesis 81). Thus, Type of Art is not significantly correlated with personal values. This result is consistent with TP analysis of PV (Output. 61). Because majority of artists ranked Aesthetic values only, we can't find differences in Personal Values with respect to Type of Art.

Hypothesis – 82:

The null hypothesis that there are no significant differences in the Personal Values of Ss with different age groups is accepted (Output. 64, Hypothesis: 82). Thus, Age and Personal Values are

not significantly correlated. The common sense belief that with increasing age, religiosity increases is nullified here. The religious values are found maximum in middle age group (52.0%) and minimum in oldest age group (16.0%). However, these differences are not statistically significant.

Cross tabs: OUTPUT: 65 HYPOTHESIS: 83

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Personal Values * Gender	430	57.2%	322	42.8%	752	100.0%

Personal Values * Gender Cross tabulation

			Gender		Total
			Female	Male	
Personal Values	Other	Count	110	112	222
		% within Personal Values	49.5%	50.5%	100.0%
		% within Gender	48.0%	55.7%	51.6%
		% of Total	25.6%	26.0%	51.6%
	Religious	Count	53	39	92
		% within Personal Values	57.6%	42.4%	100.0%
		% within Gender	23.1%	19.4%	21.4%
		% of Total	12.3%	9.1%	21.4%
	Aesthetic	Count	66	50	116
		% within Personal Values	56.9%	43.1%	100.0%
		% within Gender	28.8%	24.9%	27.0%
		% of Total	15.3%	11.6%	27.0%
Total		Count	229	201	430
	% within Personal Values		53.3%	46.7%	100.0%
	% within Gender		100.0%	100.0%	100.0%
	% of Total		53.3%	46.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.543(a)	2	.280
Likelihood Ratio	2.546	2	.280
Linear-by-Linear Association	1.992	1	.158
N of Valid Cases	430		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 43.00.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.077	.280
N of Valid Cases		430	

Cross tabs: OUTPUT: 66 HYPOTHESIS: 84

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Personal Values * Education	387	51.5%	365	48.5%	752	100.0%

Personal Values * Education Cross tabulation

			Education				Total
			Under graduate	Graduate	Double & Post Graduate	More than PG	
Personal Values	Other	Count	25	79	64	39	207
		% within Personal Values	12.1%	38.2%	30.9%	18.8%	100.0%
		% within Education	40.3%	55.2%	55.7%	58.2%	53.5%
		% of Total	6.5%	20.4%	16.5%	10.1%	53.5%
	Religious	Count	20	23	17	8	68
		% within Personal Values	29.4%	33.8%	25.0%	11.8%	100.0%
		% within Education	32.3%	16.1%	14.8%	11.9%	17.6%
		% of Total	5.2%	5.9%	4.4%	2.1%	17.6%
	Aesthetic	Count	17	41	34	20	112
		% within Personal Values	15.2%	36.6%	30.4%	17.9%	100.0%
		% within Education	27.4%	28.7%	29.6%	29.9%	28.9%
		% of Total	4.4%	10.6%	8.8%	5.2%	28.9%
Total		Count	62	143	115	67	387
	% within Personal Values		16.0%	37.0%	29.7%	17.3%	100.0%
	% within Education		100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total		16.0%	37.0%	29.7%	17.3%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.174	.060
N of Valid Cases		387	

Hypothesis - 83:

The null hypothesis that there are no significant differences in the Personal Values of Males and Females is accepted (Output. 65, Hypothesis: 83). This means that there are no gender differences in Personal Values.

Hypothesis - 84:

The null hypothesis that there are no significant differences in the Personal Values of Ss with different Educational levels is accepted. (Output. 66, Hypothesis: 84).

As the results show, within the Educational category, if the proportion of different Values are compared, we find that 'Other' values are found maximum in Ss with maximum Education of more than PG (58.2%), while Religious values are found highest in Under graduates (32.3 %) and Aesthetic values are also highest among more than PG – level. Thus, Education reduces belief in Religious values. UG are having maximum (32.3 %), and more than PG, are having minimum (11.9 %) religious values, within the Education level. However, these differences are significant at .06 level.

Cross tabs: OUTPUT: 67 HYPOTHESIS: 85

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Personal Values * Years of Experience	271	36.0%	481	64.0%	752	100.0%

Personal Values * Years of Experience Cross tabulation

			Years of Experience		Total
			20 & less than 20	more than 20	
Personal Values	Other	Count	65	60	125
		% within Personal Values	52.0%	48.0%	100.0%
		% within Years of Experience	49.6%	42.9%	46.1%
		% of Total	24.0%	22.1%	46.1%
	Religious	Count	33	19	52
		% within Personal Values	63.5%	36.5%	100.0%
		% within Years of Experience	25.2%	13.6%	19.2%
		% of Total	12.2%	7.0%	19.2%
	Aesthetic	Count	33	61	94
		% within Personal Values	35.1%	64.9%	100.0%
		% within Years of Experience	25.2%	43.6%	34.7%
		% of Total	12.2%	22.5%	34.7%
Total		Count	131	140	271
		% within Personal Values	48.3%	51.7%	100.0%
		% within Years of Experience	100.0%	100.0%	100.0%
		% of Total	48.3%	51.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.024(a)	2	.002
Likelihood Ratio	12.186	2	.002
Linear-by-Linear Association	5.361	1	.021
N of Valid Cases	271		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 25.14.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.206	.002
N of Valid Cases		271	

Hypothesis - 85:

The null hypothesis that there are no significant differences in the Personal Values of the Ss with different years of experience is rejected. (Output. 67, Hypothesis: 85). Thus, 'years of experience', is found to be significantly correlated with Personal Values.

As the results show, within personal values and within years of experience – both ways Ss with the experience of more than 20 years, had significantly more proportions of Aesthetic Values Similarly, Ss with Religious and Other values had significantly higher proportions in 20 or less than 20 years of experience both way-within values and within years.

Thus, in case of Aesthetic values, greater years of experience has significantly higher proportion of Ss, while in case of Religious and Other Values, lesser years have significantly higher proportion of Ss. In short, Personal Values and Years of experience are significantly correlated.

Cross tabs: OUTPUT: 68 HYPOTHESIS: 86

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Mental Health * Personal Values	429	57.0%	323	43.0%	752	100.0%

Mental Health * Personal Values Cross tabulation

Count

		Personal Values			Total
		Other	Religious	Aesthetic	
Mental Health	112	1	0	0	1
	124	0	0	1	1
	128	1	0	0	1
	130	1	0	0	1
	132	1	0	0	1
	133	1	0	1	2
	134	1	0	0	1
	135	1	1	0	2
	136	0	0	1	1
	137	1	0	1	2
	138	0	0	1	1
	139	1	1	1	3
	140	2	0	0	2
	141	2	1	1	4
	142	1	0	0	1
	143	3	0	2	5
	144	2	1	2	5
	146	2	0	0	2
	147	2	1	0	3
	148	2	1	0	3
	149	2	2	0	4
	150	0	1	2	3
	151	2	0	0	2
	152	1	2	0	3
	153	2	0	1	3
	154	3	2	1	6
	155	2	3	1	6
	156	2	2	3	7
	157	5	4	1	10
	158	2	2	1	5
	159	9	1	2	12
	160	0	4	0	4
	161	6	2	0	8
	162	5	2	1	8
	163	3	1	1	5
	164	2	0	3	5
	165	5	5	1	11
	166	5	2	2	9
	167	4	1	2	7
	168	4	0	3	7
	169	4	1	3	8
	170	5	3	2	10

	171	5	1	1	7
	172	4	0	0	4
	173	6	0	3	9
	174	2	1	2	5
	175	10	1	0	11
	176	7	4	4	15
	177	4	1	5	10
	178	7	3	2	12
	179	4	3	3	10
	180	5	1	2	8
	181	2	2	1	5
	182	6	2	3	11
	183	1	2	3	6
	184	6	0	1	7
	185	4	1	2	7
	186	2	1	2	5
	187	2	1	5	8
	188	5	2	2	9
	189	2	0	4	6
	190	2	1	1	4
	191	0	2	3	5
	192	4	0	3	7
	193	3	1	2	6
	194	1	0	2	3
	195	1	1	2	4
	196	6	0	7	13
	197	3	1	2	6
	198	4	2	4	10
	199	1	4	0	5
	201	1	2	2	5
	202	1	0	0	1
	203	5	0	0	5
	205	1	1	1	3
	206	1	1	0	2
	207	1	0	0	1
	208	1	0	0	1
	209	0	1	0	1
	210	1	0	1	2
	212	1	0	0	1
	213	0	1	0	1
	214	1	0	0	1
	218	0	1	0	1
	219	1	0	0	1
Total		222	91	116	429

Directional Measures

			Value
Nominal by Interval	Eta	Mental Health Dependent	.083
		Personal Values Dependent	.432

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.078	.048	1.615	.107(c)
Ordinal by Ordinal	Spearman Correlation	.086	.048	1.793	.074(c)
N of Valid Cases		429			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: 68 HYPOTHESIS: 86.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Mental Health Category * Personal Values	429	57.0%	323	43.0%	752	100.0%

Mental Health Category * Personal Values Cross tabulation

			Personal Values			Total
			Other	Religious	Aesthetic	
Mental Health Category	Very Poor	Count	4	0	1	5
		% within Mental Health Category	80.0%	.0%	20.0%	100.0%
		% within Personal Values	1.8%	.0%	.9%	1.2%
		% of Total	.9%	.0%	.2%	1.2%
	Poor	Count	29	10	13	52
		% within Mental Health Category	55.8%	19.2%	25.0%	100.0%
		% within Personal Values	13.1%	11.0%	11.2%	12.1%
		% of Total	6.8%	2.3%	3.0%	12.1%
	Average	Count	83	38	33	154
		% within Mental Health Category	53.9%	24.7%	21.4%	100.0%
		% within Personal Values	37.4%	41.8%	28.4%	35.9%
		% of Total	19.3%	8.9%	7.7%	35.9%
	Good	Count	78	28	52	158
		% within Mental Health Category	49.4%	17.7%	32.9%	100.0%
		% within Personal Values	35.1%	30.8%	44.8%	36.8%
		% of Total	18.2%	6.5%	12.1%	36.8%
	Very good	Count	28	15	17	60
		% within Mental Health Category	46.7%	25.0%	28.3%	100.0%
		% within Personal Values	12.6%	16.5%	14.7%	14.0%
		% of Total	6.5%	3.5%	4.0%	14.0%
Total		Count	222	91	116	429
		% within Mental Health Category	51.7%	21.2%	27.0%	100.0%
		% within Personal Values	100.0%	100.0%	100.0%	100.0%
		% of Total	51.7%	21.2%	27.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.901(a)	8	.351
Likelihood Ratio	9.866	8	.275
Linear-by-Linear Association	2.847	1	.092
N of Valid Cases	429		

a 3 cells (20.0%) have expected count less than 5. The minimum expected count is 1.06.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.143			.351
Interval by Interval	Pearson's R	.082	.048	1.691	.092(c)
Ordinal by Ordinal	Spearman Correlation	.082	.048	1.706	.089(c)
N of Valid Cases		429			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Partial Corr: OUTPUT: 68 HYPOTHESIS: 86.2

Correlations

Control Variables			Mental Health	Personal Values
Self-Actualization & Emotional Competence & Locus of Control category & Internal Locus of Control & Androgyny	Mental Health	Correlation	1.000	.051
		Significance (2-tailed)	.	.307
		df	0	404
	Personal Values	Correlation	.051	1.000
		Significance (2-tailed)	.307	.
		df	404	0

Partial Corr

Correlations

Control Variables			Mental Health	Personal Values
Self-Actualization	Mental Health	Correlation	1.000	.058
		Significance (2-tailed)	.	.229
		df	0	423
	Personal Values	Correlation	.058	1.000
		Significance (2-tailed)	.229	.
		df	423	0

Partial Corr

Correlations

Control Variables			Mental Health	Personal Values
Emotional Competence	Mental Health	Correlation	1.000	.053
		Significance (2-tailed)	.	.279
		df	0	425
	Personal Values	Correlation	.053	1.000
		Significance (2-tailed)	.279	.
		df	425	0

Partial Corr

Correlations

Control Variables			Mental Health	Personal Values
Locus of Control category	Mental Health	Correlation	1.000	.096
		Significance (2-tailed)	.	.050
		df	0	416
	Personal Values	Correlation	.096	1.000
		Significance (2-tailed)	.050	.
		df	416	0

Partial Corr

Correlations

Control Variables			Mental Health	Personal Values
Internal Locus of Control	Mental Health	Correlation	1.000	.119
		Significance (2-tailed)	.	.015
		df	0	413
	Personal Values	Correlation	.119	1.000
		Significance (2-tailed)	.015	.
		df	413	0

Partial Corr

Correlations

Control Variables			Mental Health	Personal Values
Androgyny	Mental Health	Correlation	1.000	.084
		Significance (2-tailed)	.	.085
		df	0	423
	Personal Values	Correlation	.084	1.000
		Significance (2-tailed)	.085	.
		df	423	0

Hypothesis - 86:

The null hypothesis that there is no significant correlation between Mental Health and Personal Values is accepted (Output. 68, Hypothesis: 86).

Though ANOVA results had suggested significant differences in the Mental Health of Saints, Artists, and Normals (Output. 1, Hypothesis: 2), the Ss with Religious, Aesthetic and Other values do not differ significantly with respect to Mental Health. Here again, Type of Person and Personal Values differ significantly on Mental Health results, as both differed in case of Androgyny results. In case of ANOVA results, artists scored significantly higher on Mental Health than normals and saints. In the same way in value analysis also, Ss with Aesthetic values had significantly higher proportion in 'Good' category of MH, while Ss with Religious and 'Other' values had higher proportion in 'Average' category of Mental Health. Thus, Ss with Aesthetic values represent better Mental Health, but this difference is not found to be statistically significant.

In short, neither in score-wise data of Mental Health (Output. 68, Hypothesis: 86) nor in category-wise data of Mental Health (Output. 68, Hypothesis: 86), Personal Values are found to be significantly correlated with Mental Health.

The Partial correlations of MH and PV is also found to be non-significant when the effects of all other personality variables are statistically controlled, except when LOC and Internality of LOC are controlled, the correlation between MH and PV is found to be significant. This means that because of the effect of LOC & Internality of Locus of Control, the correlation between MH and PV becomes non-significant.

Cross tabs: OUTPUT: 69 HYPOTHESIS: 87

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Self-Actualization * Personal Values	426	56.6%	326	43.4%	752	100.0%

Self-Actualization * Personal Values Cross tabulation

Count

		Personal Values			Total
		Other	Religious	Aesthetic	
Self-Actualization	109	0	1	0	1
	114	1	0	0	1
	118	1	0	0	1
	120	1	0	0	1
	126	1	0	0	1
	128	1	0	0	1
	130	0	1	0	1
	133	1	0	0	1
	134	1	0	0	1
	136	1	0	0	1
	138	0	0	2	2
	139	2	1	0	3
	140	1	0	0	1
	141	0	1	0	1
	142	3	0	1	4
	143	0	3	1	4
	144	2	0	0	2
	145	1	1	0	2
	146	1	0	0	1
	147	2	0	1	3
	148	2	2	1	5
	149	0	1	0	1
	150	4	1	1	6
	151	2	3	4	9
	152	0	1	0	1
	153	3	0	0	3
	154	3	1	1	5
	155	3	2	1	6

156	3	1	2	6
157	1	2	2	5
158	3	2	2	7
159	3	0	0	3
160	0	1	0	1
161	1	2	0	3
162	0	1	0	1
163	3	3	6	12
164	6	5	3	14
165	6	1	4	11
166	8	3	1	12
167	5	0	2	7
168	6	2	3	11
169	6	0	1	7
170	1	3	1	5
171	4	2	2	8
172	2	1	5	8
173	7	4	1	12
174	7	4	1	12
175	5	1	4	10
176	3	1	2	6
177	10	1	2	13
178	7	0	4	11
179	5	1	2	8
180	3	1	4	8
181	6	1	3	10
182	4	0	2	6
183	5	1	1	7
184	5	0	4	9
185	4	0	2	6
186	2	0	0	2
187	5	4	2	11
188	3	1	3	7
189	5	1	0	6
190	3	1	0	4
191	4	2	2	8
192	4	2	8	14
193	5	3	4	12
194	1	0	1	2
195	5	3	2	10
196	1	1	1	3
197	4	2	5	11
198	1	1	1	3
199	2	1	1	4
200	1	1	2	4
201	0	0	1	1
202	2	0	0	2

	204	2	0	0	2
	205	1	2	0	3
	208	0	0	1	1
	210	1	0	0	1
	211	1	0	1	2
	214	1	0	0	1
	215	2	0	0	2
	219	0	1	0	1
	225	0	0	1	1
Total		222	89	115	426

Directional Measures

			Value
Nominal by Interval	Eta	Self-Actualization Dependent	.108
		Personal Values Dependent	.424

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	.032	.037	.865	.387
	Spearman Correlation	.042	.048	.859	.391(c)
Interval by Interval	Pearson's R	.064	.046	1.313	.190(c)
N of Valid Cases		426			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: 69 HYPOTHESIS: 87.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Self-Actilization Category * Personal Values	428	56.9%	324	43.1%	752	100.0%

Self-Actualization Category * Personal Values Cross tabulation

			Personal Values			Total
			Other	Religious	Aesthetic	
Self-Actualization Category	Low	Count	47	26	19	92
		% within Self-Actualization Category	51.1%	28.3%	20.7%	100.0%
		% within Personal Values	21.2%	28.9%	16.4%	21.5%
		% of Total	11.0%	6.1%	4.4%	21.5%
	Medium	Count	120	38	61	219
		% within Self-Actualization Category	54.8%	17.4%	27.9%	100.0%
		% within Personal Values	54.1%	42.2%	52.6%	51.2%
		% of Total	28.0%	8.9%	14.3%	51.2%
	High	Count	55	26	36	117
		% within Self-Actualization Category	47.0%	22.2%	30.8%	100.0%
		% within Personal Values	24.8%	28.9%	31.0%	27.3%
		% of Total	12.9%	6.1%	8.4%	27.3%
Total		Count	222	90	116	428
	% within Self-Actualization Category		51.9%	21.0%	27.1%	100.0%
	% within Personal Values		100.0%	100.0%	100.0%	100.0%
	% of Total		51.9%	21.0%	27.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.719(a)	4	.151
Likelihood Ratio	6.697	4	.153
Linear-by-Linear Association	1.523	1	.217
N of Valid Cases	428		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.35.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.124			.151
Ordinal by Ordinal	Kendall's tau-b	.049	.042	1.163	.245
N of Valid Cases		428			

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Partial Corr: OUTPUT: 69, HYPOTHESIS: 87.2

Correlations

Control Variables			Self-Actualization	Personal Values
Mental Health & Emotional Competence & Locus of Control category & Internal Locus of Control & Androgyny	Self-Actualization	Correlation	1.000	.058
		Significance (2-tailed)	.	.241
		df	0	404
	Personal Values	Correlation	.058	1.000
		Significance (2-tailed)	.241	.
		df	404	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Personal Values
Mental Health	Self-Actualization	Correlation	1.000	.042
		Significance (2-tailed)	.	.385
		df	0	423
	Personal Values	Correlation	.042	1.000
		Significance (2-tailed)	.385	.
		df	423	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Personal Values
Emotional Competence	Self-Actualization	Correlation	1.000	.050
		Significance (2-tailed)	.	.307
		df	0	422
	Personal Values	Correlation	.050	1.000
		Significance (2-tailed)	.307	.
		df	422	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Personal Values
Locus of Control category	Self-Actualization	Correlation	1.000	.078
		Significance (2-tailed)	.	.111
		df	0	413
	Personal Values	Correlation	.078	1.000
		Significance (2-tailed)	.111	.
		df	413	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Personal Values
Internal Locus of Control	Self-Actualization	Correlation	1.000	.097
		Significance (2-tailed)	.	.050
		df	0	410
	Personal Values	Correlation	.097	1.000
		Significance (2-tailed)	.050	.
		df	410	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Personal Values
Androgyny	Self-Actualization	Correlation	1.000	.068
		Significance (2-tailed)	.	.161
		df	0	420
	Personal Values	Correlation	.068	1.000
		Significance (2-tailed)	.161	.
		df	420	0

Hypothesis - 87:

The null hypothesis that there is no significant correlation between Personal Values and Self-actualization is also accepted. (Output. 69, Hypothesis: 87) Personal Values and Self-actualization are found to be correlated in neither score-wise data of SEA (Output. 69, Hypothesis: 87) nor in category-wise data of SEA. (Output. 69, Hypothesis: 87.1)

Though Artists were found to have significantly higher scores on SEA (Output. 5, Hypothesis: 20) than normals and saints, the Ss with Aesthetic

values do not have significantly higher Self-actualization than those with religious and other values. This result suggests that to be an Artist, is itself a Self-actualizing process, while to have a preference for Aesthetic Values does not mean necessarily the actualization of one's potentials. So preference for Aesthetic, Religious or the Other Values, makes no difference either in MH or in one's Self-actualization. The Values represent only belief system, while the being an Artist represents the actual Self-transforming process.

The Partial correlations between Self-actualization and PV are also found to be non-significant, when the other personality variables are statistically controlled, except for Int. of LOC as statistical control. Thus, internality of LOC contributes significantly to make the correlation between SEA & PV non-significant. (Output. 69, Hypothesis: 87.2)

SEA & Int. of LOC are significantly correlated when PV is controlled (Output. 78, Hypothesis: 97). Similarly, PV and Int. of LOC are highly significant when all the variables including SEA are controlled (Output. 71, Hypothesis: 90.1). Thus, because Int.LOC is negatively correlated with PV, its effect together with SEA, on PV gives non-significant correlation and its control gives significant correlation between SEA and PV.

In short, Int.LOC, SEA & PV are deeply interrelated. The non-significant correlation between SEA and PV was due to the underlying negative effect of third variable of Int.LOC.

Cross tabs: OUTPUT: 70 HYPOTHESIS: 88

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Emotional Competence * Personal Values	428	56.9%	324	43.1%	752	100.0%

Emotional Competence * Personal Values Cross tabulation

Count

		Personal Values			
		Other	Religious	Aesthetic	Total
Emotional Competence	174	0	1	0	1
	186	1	0	0	1
	191	1	0	0	1
	194	2	0	0	2
	197	0	1	0	1
	198	0	0	1	1
	204	1	0	0	1
	205	1	0	0	1
	206	2	0	0	2
	208	1	0	1	2
	212	1	0	0	1
	213	4	0	0	4
	215	0	1	0	1
	216	1	0	1	2
	219	1	0	1	2
	220	3	0	0	3
	221	1	0	1	2
	222	1	0	0	1
	223	2	1	0	3
	224	0	0	1	1
	225	0	0	1	1
	228	1	1	0	2
	229	1	1	0	2
	230	1	0	2	3
	231	0	0	3	3
	232	0	2	1	3
	233	1	0	0	1
	234	1	1	0	2
	236	0	1	0	1
	237	2	1	0	3
	238	0	1	0	1

	239	0	0	1	1
	241	2	0	0	2
	242	1	0	0	1
	243	1	0	1	2
	244	2	0	0	2
	245	2	1	0	3
	248	1	1	0	2
	249	1	1	0	2
	250	1	1	3	5
	251	0	1	1	2
	252	2	0	1	3
	253	3	1	0	4
	254	3	0	1	4
	255	3	0	1	4
	256	1	0	1	2
	257	3	1	0	4
	259	2	0	0	2
	261	5	2	0	7
	262	1	0	0	1
	263	2	1	2	5
	264	2	1	0	3
	265	4	1	2	7
	266	2	1	1	4
	267	3	0	1	4
	268	1	2	2	5
	269	5	1	5	11
	270	1	0	1	2
	271	4	3	2	9
	272	3	1	1	5
	273	7	1	3	11
	274	2	2	1	5
	275	0	2	1	3
	276	2	0	0	2
	277	1	0	1	2
	278	6	0	0	6
	279	2	0	4	6
	280	4	0	1	5
	281	4	2	2	8
	282	2	1	1	4
	283	2	0	1	3
	284	3	4	3	10
	285	1	1	2	4
	286	6	0	2	8
	287	1	2	1	4
	288	3	3	0	6
	289	3	3	2	8

	290	4	1	1	6
	292	3	0	3	6
	293	4	0	2	6
	294	3	3	2	8
	295	3	1	1	5
	296	0	2	1	3
	297	2	0	0	2
	298	3	3	3	9
	299	1	0	0	1
	300	6	2	4	12
	301	0	1	2	3
	302	3	2	3	8
	303	2	0	1	3
	304	2	1	4	7
	305	4	1	0	5
	306	2	1	5	8
	307	1	0	0	1
	308	0	1	0	1
	309	3	2	1	6
	310	3	1	0	4
	311	0	1	1	2
	312	2	0	1	3
	313	1	0	4	5
	314	2	0	2	4
	316	2	2	0	4
	317	3	0	0	3
	318	1	1	1	3
	319	1	0	0	1
	320	0	1	1	2
	321	1	0	2	3
	322	2	1	1	4
	325	1	0	1	2
	326	1	1	0	2
	327	1	0	0	1
	328	1	2	0	3
	329	0	1	0	1
	330	2	1	2	5
	331	1	0	0	1
	332	0	1	0	1
	333	1	0	1	2
	334	1	0	0	1
	335	1	1	0	2
	336	1	0	0	1
	337	2	0	0	2
	339	0	0	1	1
	345	1	0	0	1

	346	0	1	0	1
	349	0	1	0	1
	353	2	0	0	2
	358	1	1	0	2
Total		221	91	116	428

Directional Measures

			Value
Nominal by Interval	Eta	Emotional Competence Dependent	.076
		Personal Values Dependent	.525

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	.063	.046	1.308	.192(c)
Ordinal by Ordinal	Spearman Correlation	.074	.048	1.532	.126(c)
N of Valid Cases		428			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Cross tabs: OUTPUT: 70 HYPOTHESIS: 88.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Emotional Competence category * Personal Values	428	56.9%	324	43.1%	752	100.0%

Emotional Competence category * Personal Values Cross tabulation

			Personal Values			Total
			Other	Religious	Aesthetic	
Emotional Competence category	Highly Incompetent	Count	0	1	0	1
		% within Emotional Competence category	.0%	100.0%	.0%	100.0%
		% within Personal Values	.0%	1.1%	.0%	.2%
		% of Total	.0%	.2%	.0%	.2%
	Incompetent	Count	22	3	6	31
		% within Emotional Competence category	71.0%	9.7%	19.4%	100.0%
		% within Personal Values	10.0%	3.3%	5.2%	7.2%
		% of Total	5.1%	.7%	1.4%	7.2%
	Average	Count	140	58	72	270
		% within Emotional Competence category	51.9%	21.5%	26.7%	100.0%
		% within Personal Values	63.3%	63.7%	62.1%	63.1%
		% of Total	32.7%	13.6%	16.8%	63.1%
	Competent	Count	32	14	29	75
		% within Emotional Competence category	42.7%	18.7%	38.7%	100.0%
		% within Personal Values	14.5%	15.4%	25.0%	17.5%
		% of Total	7.5%	3.3%	6.8%	17.5%
	Highly Competent	Count	27	15	9	51
		% within Emotional Competence category	52.9%	29.4%	17.6%	100.0%
		% within Personal Values	12.2%	16.5%	7.8%	11.9%
		% of Total	6.3%	3.5%	2.1%	11.9%
Total		Count	221	91	116	428
		% within Emotional Competence category	51.6%	21.3%	27.1%	100.0%
		% within Personal Values	100.0%	100.0%	100.0%	100.0%
		% of Total	51.6%	21.3%	27.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.017(a)	8	.030
Likelihood Ratio	16.468	8	.036
Linear-by-Linear Association	.785	1	.376
N of Valid Cases	428		

a 3 cells (20.0%) have expected count less than 5. The minimum expected count is .21.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.196	.030
N of Valid Cases		428	

Partial Corr: OUTPUT: 70 HYPOTHESIS: 88.2

Correlations

Control Variables			Emotional Competence	Personal Values
Mental Health & Self-Actualization & Locus of Control category & Internal Locus of Control & Androgyny	Emotional Competence	Correlation	1.000	.049
		Significance (2-tailed)	.	.321
		df	0	404
	Personal Values	Correlation	.049	1.000
		Significance (2-tailed)	.321	.
		df	404	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Personal Values
Mental Health	Emotional Competence	Correlation	1.000	.015
		Significance (2-tailed)	.	.759
		df	0	425
	Personal Values	Correlation	.015	1.000
		Significance (2-tailed)	.759	.
		df	425	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Personal Values
Self-Actualization	Emotional Competence	Correlation	1.000	.045
		Significance (2-tailed)	.	.359
		df	0	422
	Personal Values	Correlation	.045	1.000
		Significance (2-tailed)	.359	.
		df	422	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Personal Values
Locus of Control category	Emotional Competence	Correlation	1.000	.088
		Significance (2-tailed)	.	.072
		df	0	416
	Personal Values	Correlation	.088	1.000
		Significance (2-tailed)	.072	.
		df	416	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Personal Values
Internal Locus of Control	Emotional Competence	Correlation	1.000	.118
		Significance (2-tailed)	.	.016
		df	0	413
	Personal Values	Correlation	.118	1.000
		Significance (2-tailed)	.016	.
		df	413	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Personal Values
Androgyny	Emotional Competence	Correlation	1.000	.061
		Significance (2-tailed)	.	.208
		df	0	423
	Personal Values	Correlation	.061	1.000
		Significance (2-tailed)	.208	.
		df	423	0

Hypothesis: 88

The null hypothesis that there is no significant correlation between Emotional competence and Personal values is accepted (Output. 70, Hypothesis: 88), in score wise analysis of EC. But on the basis of EC – Scores, the Ss were classified into five categories of Highly Incompetent, Incompetent, Average, Competent, and Highly Competent. If the correlation between these EC category and PV category is calculated, then the

contingency co-efficient was found to be statistically significant. That is, EC and PV are significantly correlated, if category wise analysis is performed.

As the results show, in each of five categories of EC, the 'Other' values had maximum proportion of Ss. The reason may be that to focus on the Religious and the Aesthetic values, corresponding to Saints and Artists, all the other values, (as measured by Personal Value Questionnaire) namely, Democratic, Social, Economic, Knowledge, Hedonistic, Family, and Health- all these seven values were grouped into one category as the 'Other'. Thus, from the three PV categories, the 'Other' category underlied seven values. This being so, the 'Other' had highest proportion of Ss in each of the category of Emotional Competence.

However, here the researcher was more interested in Religious and Aesthetic values. So if we compare the results of the Religious and the Aesthetic values on Emotional Competence category, we find that the proportion of the 'Competent' Ss is significantly higher in Aesthetic values (38.7%, 25.0%) than in Religious values (18.7%, 15.4%) within EC-category and also within Personal Values, while the 'Highly Competent' EC-category is significantly higher in Religious values (29.4%, 16.5%) than in the Aesthetic values (17.6%, 7.8%) within EC-category and within Personal Values (Output. 70, Hypothesis: 88.1). The 'Incompetent' EC-category is significantly lower in Religious Values (9.7%, 3.3%) than in Aesthetic values (19.4%, 5.2%). Thus Aesthetic Values yields significantly higher Competent EC-category, while Religious Value yields significantly higher Highly Competent and significantly low Incompetent proportion of Emotional Competence. Thus, compared to Aesthetic values, Religious Values can be said to be more facilitating Emotional competence.

In short, Personal values and Emotional competence are significantly correlated with Religious values facilitating better Emotional competence in general.

It is important to distinguish here that in case of Mental Health, the correlation between MH and PV was found to be non – significant, while in case of EC, it is found to be significant. Thus, though EC constitutes a major factor in MH, its contribution in correlating with PV was not so significant to make the correlation of MH with PV significant. But one's values, especially one's Religious values, do facilitate Emotional Competence.

Though category-wise PV is found to be significantly correlated with EC, the EC score was not significantly correlated with PV. Similarly, all the partial correlations of EC & PV are non-significant except when LOC and Int. LOC are controlled. Thus, just like MH and SEA, in case of EC also, the third underlying variable of LOC and Int. LOC plays significant role. (Output. 70, Hypothesis: 88.2)

Cross tabs: OUTPUT: 71 HYPOTHESIS: 89

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Locus of Control category * Personal Values	420	55.9%	332	44.1%	752	100.0%

Locus of Control category * Personal Values Cross tabulation

			Personal Values			Total
			Other	Religious	Aesthetic	
Locus of Control category	External	Count	39	10	23	72
		% within Locus of Control category	54.2%	13.9%	31.9%	100.0%
		% within Personal Values	18.0%	11.0%	20.5%	17.1%
		% of Total	9.3%	2.4%	5.5%	17.1%
	Internal	Count	178	81	89	348
		% within Locus of Control category	51.1%	23.3%	25.6%	100.0%
		% within Personal Values	82.0%	89.0%	79.5%	82.9%
		% of Total	42.4%	19.3%	21.2%	82.9%
Total		Count	217	91	112	420
	% within Locus of Control category		51.7%	21.7%	26.7%	100.0%
	% within Personal Values		100.0%	100.0%	100.0%	100.0%
	% of Total		51.7%	21.7%	26.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.439(a)	2	.179
Likelihood Ratio	3.681	2	.159
Linear-by-Linear Association	.093	1	.761
N of Valid Cases	420		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.60.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.090	.179
N of Valid Cases		420	

Partial Corr: OUTPUT: 71 HYPOTHESIS: 89.1

Correlations

Control Variables			Locus of Control category	Personal Values
Mental Health & Self-Actualization & Emotional Competence & Androgyny	Locus of Control category	Correlation	1.000	-.027
		Significance (2-tailed)	.	.584
		df	0	408
	Personal Values	Correlation	-.027	1.000
		Significance (2-tailed)	.584	.
		df	408	0

Partial Corr

Correlations

Control Variables			Locus of Control category	Personal Values
Mental Health	Locus of Control category	Correlation	1.000	-.028
		Significance (2-tailed)	.	.569
		df	0	416
	Personal Values	Correlation	-.028	1.000
		Significance (2-tailed)	.569	.
		df	416	0

Partial Corr

Correlations

Control Variables			Locus of Control category	Personal Values
Self-Actualization	Locus of Control category	Correlation	1.000	-.026
		Significance (2-tailed)	.	.596
		df	0	413
	Personal Values	Correlation	-.026	1.000
		Significance (2-tailed)	.596	.
		df	413	0

Partial Corr

Correlations

Control Variables			Locus of Control category	Personal Values
Emotional Competence	Locus of Control category	Correlation	1.000	-.027
		Significance (2-tailed)	.	.584
		df	0	416
	Personal Values	Correlation	-.027	1.000
		Significance (2-tailed)	.584	.
		df	416	0

Partial Corr

Correlations

Control Variables			Locus of Control category	Personal Values
Androgyny	Locus of Control category	Correlation	1.000	-.008
		Significance (2-tailed)	.	.866
		df	0	415
	Personal Values	Correlation	-.008	1.000
		Significance (2-tailed)	.866	.
		df	415	0

Cross tabs: Output: 71 HYPOTHESIS: 90

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Internal Locus of Control * Personal Values	417	55.5%	335	44.5%	752	100.0%

Internal Locus of Control * Personal Values Cross tabulation

			Personal Values			Total
			Other	Religious	Aesthetic	
Internal Locus of Control	4	Count	0	0	1	1
		% of Total	.0%	.0%	.2%	.2%
	5	Count	1	1	2	4
		% of Total	.2%	.2%	.5%	1.0%
	6	Count	0	0	2	2
		% of Total	.0%	.0%	.5%	.5%
	7	Count	2	0	0	2
		% of Total	.5%	.0%	.0%	.5%
	8	Count	5	2	4	11
		% of Total	1.2%	.5%	1.0%	2.6%
	9	Count	8	2	5	15
		% of Total	1.9%	.5%	1.2%	3.6%
	10	Count	9	2	5	16
		% of Total	2.2%	.5%	1.2%	3.8%
	11	Count	15	4	7	26
		% of Total	3.6%	1.0%	1.7%	6.2%
	12	Count	19	15	17	51
		% of Total	4.6%	3.6%	4.1%	12.2%
	13	Count	20	11	8	39
		% of Total	4.8%	2.6%	1.9%	9.4%
	14	Count	24	13	10	47
		% of Total	5.8%	3.1%	2.4%	11.3%
	15	Count	20	8	13	41
		% of Total	4.8%	1.9%	3.1%	9.8%
	16	Count	19	10	9	38
		% of Total	4.6%	2.4%	2.2%	9.1%
	17	Count	17	6	7	30
		% of Total	4.1%	1.4%	1.7%	7.2%
	18	Count	14	6	6	26
		% of Total	3.4%	1.4%	1.4%	6.2%
	19	Count	12	3	4	19
		% of Total	2.9%	.7%	1.0%	4.6%
	20	Count	17	4	6	27
		% of Total	4.1%	1.0%	1.4%	6.5%
	21	Count	12	2	4	18
		% of Total	2.9%	.5%	1.0%	4.3%
	22	Count	2	2	0	4
		% of Total	.5%	.5%	.0%	1.0%
Total		**Count**	**216**	**91**	**110**	**417**
		% of Total	**51.8%**	**21.8%**	**26.4%**	**100.0%**

Directional Measures

			Value
Nominal by Interval	Eta	Internal Locus of Control Dependent	.121
		Personal Values Dependent	.204

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Interval by Interval	Pearson's R	-.120	.050	-2.458	.014(c)
Ordinal by Ordinal	Spearman Correlation	-.107	.049	-2.197	.029(c)
N of Valid Cases		417			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Partial Corr: OUTPUT: 71 HYPOTHESIS: 90.1

Correlations

Control Variables			Internal Locus of Control	Personal Values
Mental Health & Self-Actualization & Emotional Competence & Androgyny	Internal Locus of Control	Correlation	1.000	-.146
		Significance (2-tailed)	.	.003
		Df	0	405
	Personal Values	Correlation	-.146	1.000
		Significance (2-tailed)	.003	.
		Df	405	0

Partial Corr

Correlations

Control Variables			Internal Locus of Control	Personal Values
Mental Health	Internal Locus of Control	Correlation	1.000	-.138
		Significance (2-tailed)	.	.005
		Df	0	413
	Personal Values	Correlation	-.138	1.000
		Significance (2-tailed)	.005	.
		Df	413	0

Partial Corr

Correlations

Control Variables			Internal Locus of Control	Personal Values
Self-Actualization	Internal Locus of Control	Correlation	1.000	-.132
		Significance (2-tailed)	.	.007
		df	0	410
	Personal Values	Correlation	-.132	1.000
		Significance (2-tailed)	.007	.
		df	410	0

Partial Corr

Correlations

Control Variables			Internal Locus of Control	Personal Values
Emotional Competence	Internal Locus of Control	Correlation	1.000	-.143
		Significance (2-tailed)	.	.003
		df	0	413
	Personal Values	Correlation	-.143	1.000
		Significance (2-tailed)	.003	.
		df	413	0

Partial Corr

Correlations

Control Variables			Internal Locus of Control	Personal Values
Androgyny	Internal Locus of Control	Correlation	1.000	-.117
		Significance (2-tailed)	.	.017
		df	0	412
	Personal Values	Correlation	-.117	1.000
		Significance (2-tailed)	.017	.
		df	412	0

Univariate Analysis of Variance: OUTPUT: 71 HYPOTHESIS: 90.2

Between-Subjects Factors

		Value Label	N
Personal Values	0	Other	216
	1	Religious	91
	2	Aesthetic	110

Tests of Between-Subjects Effects

Dependent Variable: Internal Locus of Control

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	80.159(a)	2	40.080	3.064	.048
Intercept	75785.369	1	75785.369	5793.736	.000
pvcate	80.159	2	40.080	3.064	.048
Error	5415.356	414	13.081		
Total	93678.000	417			
Corrected Total	5495.516	416			

a R Squared = .015 (Adjusted R Squared = .010)

Estimated Marginal Means

Personal Values

Dependent Variable: Internal Locus of Control

Personal Values	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Other	14.903	.246	14.419	15.387
Religious	14.516	.379	13.771	15.262
Aesthetic	13.855	.345	13.177	14.532

Post Hoc Tests

Personal Values

Multiple Comparisons

Dependent Variable: Internal Locus of Control
LSD

(I) Personal Values	(J) Personal Values	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Upper Bound
Other	Religious	.39	.452	.393	-.50	1.27
	Aesthetic	1.05(*)	.424	.014	.22	1.88
Religious	Other	-.39	.452	.393	-1.27	.50
	Aesthetic	.66	.513	.197	-.35	1.67
Aesthetic	Other	-1.05(*)	.424	.014	-1.88	-.22
	Religious	-.66	.513	.197	-1.67	.35

Based on observed means.
* The mean difference is significant at the .05 level.

Hypothesis: 89

The null hypothesis that there is no significant correlation between Locus of Control and Personal values is accepted (Output. 7, Hypothesis: 89). As discussed earlier, more than 80% of Ss in all the categories are found to be Internal controls. So there can't be significant differences between the Internals and the Externals with different Personal Values. So

the correlation between LOC and PV is non-significant. All the partial correlations between LOC and PV are also non-significant (Output. 70, Hypothesis: 89.1)

Hypothesis: 90

The null hypothesis that there is no significant correlation between Internality of LOC and Personal value is rejected. (Output. 71, Hypothesis: 90). That is, the correlation between Internality of LOC and PV is positive and significant. The partial correlations between PV and Int. LOC are also found to be significant. (Output. 71, Hypothesis: 90.1) To get the more meaningful interpretation between Int. LOC and PV, One-way ANOVA was performed, for three values of PV and Int. LOC as dependent variable. As the results show, PV has significant effect of Int. LOC with highest scores of Int.LOC are found in Ss with 'Other' values than in Religious and Aesthetic values respectively. (Output. 71, Hypothesis: 90.2)

Type of Person analysis (Output. 22, Hypothesis: 31) had shown maximum Internality of LOC in Saints and minimum Internality of LOC among Artists. In Value analysis, the Ss with Aesthetic values score minimum on Internality, but the results for saints and for Religious values differ. The reason, as explained earlier, lies in the fact that Ss with Religious values do not mean saints and saints have opted for more democratic and/or Family values in Christianity and Jainism respectively. In short, Ss with different Personal Values differ significantly in their Infernality of LOC.

Concomitant correlation Analysis: Part: II Correlations among other personality variables:

Partial Corr: OUTPUT: 72 HYPOTHESIS: 91

Correlations

Control Variables			Mental Health	Self-Actualization
Emotional Competence	Mental Health	Correlation	1.000	.165
		Significance (2-tailed)	.	.001
		df	0	431
	Self-Actualization	Correlation	.165	1.000
		Significance (2-tailed)	.001	.
		df	431	0

Partial Corr

Correlations

Control Variables			Mental Health	Self-Actualization
Locus of Control category	Mental Health	Correlation	1.000	.308
		Significance (2-tailed)	.	.000
		df	0	417
	Self-Actualization	Correlation	.308	1.000
		Significance (2-tailed)	.000	.
		df	417	0

Partial Corr

Correlations

Control Variables			Mental Health	Self-Actualization
Internal Locus of Control	Mental Health	Correlation	1.000	.294
		Significance (2-tailed)	.	.000
		df	0	413
	Self-Actualization	Correlation	.294	1.000
		Significance (2-tailed)	.000	.
		df	413	0

Partial Corr

Correlations

Control Variables			Mental Health	Self-Actualization
Personal Values	Mental Health	Correlation	1.000	.310
		Significance (2-tailed)	.	.000
		df	0	423
	Self-Actualization	Correlation	.310	1.000
		Significance (2-tailed)	.000	.
		df	423	0

Partial Corr

Correlations

Control Variables			Mental Health	Self-Actualization
Androgyny	Mental Health	Correlation	1.000	.265
		Significance (2-tailed)	.	.000
		df	0	429
	Self-Actualization	Correlation	.265	1.000
		Significance (2-tailed)	.000	.
		df	429	0

Cross tabs: OUTPUT: 72 HYPOTHESIS: 91.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Mental Health Category * Self-Actualization Category	436	58.0%	316	42.0%	752	100.0%

Mental Health Category * Self-Actualization Category Cross tabulation

			Self-Actualization Category			Total
			Low	Medium	High	
Mental Health Category	Very Poor	Count	2	2	1	5
		% within Mental Health Category	40.0%	40.0%	20.0%	100.0%
		% within Self-Actualization Category	2.1%	.9%	.8%	1.1%
		% of Total	.5%	.5%	.2%	1.1%
	Poor	Count	17	28	7	52
		% within Mental Health Category	32.7%	53.8%	13.5%	100.0%
		% within Self-Actualization Category	18.1%	12.6%	5.8%	11.9%
		% of Total	3.9%	6.4%	1.6%	11.9%
	Average	Count	45	78	32	155
		% within Mental Health Category	29.0%	50.3%	20.6%	100.0%
		% within Self-Actualization Category	47.9%	35.1%	26.7%	35.6%
		% of Total	10.3%	17.9%	7.3%	35.6%
	Good	Count	22	92	47	161
		% within Mental Health Category	13.7%	57.1%	29.2%	100.0%
		% within Self-Actualization Category	23.4%	41.4%	39.2%	36.9%
		% of Total	5.0%	21.1%	10.8%	36.9%
	Very good	Count	8	22	33	63
		% within Mental Health Category	12.7%	34.9%	52.4%	100.0%
		% within Self-Actualization Category	8.5%	9.9%	27.5%	14.4%
		% of Total	1.8%	5.0%	7.6%	14.4%
Total		Count	94	222	120	436
		% within Mental Health Category	21.6%	50.9%	27.5%	100.0%
		% within Self-Actualization Category	100.0%	100.0%	100.0%	100.0%
		% of Total	21.6%	50.9%	27.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.158(a)	8	.000
Likelihood Ratio	38.794	8	.000
Linear-by-Linear Association	30.053	1	.000
N of Valid Cases	436		

a 3 cells (20.0%) have expected count less than 5. The minimum expected count is 1.08.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.290			.000
Interval by Interval	Pearson's R	.263	.046	5.675	.000(c)
Ordinal by Ordinal	Spearman Correlation	.267	.046	5.781	.000(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Partial Corr: OUTPUT: 73 HYPOTHESIS: 92

Correlations

Control Variables			Mental Health	Emotional Competence
Self-Actualization & Locus of Control category & Internal Locus of Control & Personal Values & Androgyny	Mental Health	Correlation	1.000	.579
		Significance (2-tailed)	.	.000
		df	0	404
	Emotional Competence	Correlation	.579	1.000
		Significance (2-tailed)	.000	.
		df	404	0

Partial Corr

Correlations

Control Variables			Mental Health	Emotional Competence
Self-Actualization	Mental Health	Correlation	1.000	.606
		Significance (1-tailed)	.	.000
		df	0	431
	Emotional Competence	Correlation	.606	1.000
		Significance (1-tailed)	.000	.
		df	431	0

Partial Corr

Correlations

Control Variables			Mental Health	Emotional Competence
Locus of Control category	Mental Health	Correlation	1.000	.635
		Significance (1-tailed)	.	.000
		df	0	420
	Emotional Competence	Correlation	.635	1.000
		Significance (1-tailed)	.000	.
		df	420	0

Partial Corr

Correlations

Control Variables			Mental Health	Emotional Competence
Internal Locus of Control	Mental Health	Correlation	1.000	.626
		Significance (1-tailed)	.	.000
		df	0	416
	Emotional Competence	Correlation	.626	1.000
		Significance (1-tailed)	.000	.
		df	416	0

Partial Corr

Correlations

Control Variables			Mental Health	Emotional Competence
Personal Values	Mental Health	Correlation	1.000	.640
		Significance (1-tailed)	.	.000
		df	0	425
	Emotional Competence	Correlation	.640	1.000
		Significance (1-tailed)	.000	.
		df	425	0

Partial Corr

Correlations

Control Variables			Mental Health	Emotional Competence
Androgyny	Mental Health	Correlation	1.000	.618
		Significance (1-tailed)	.	.000
		df	0	432
	Emotional Competence	Correlation	.618	1.000
		Significance (1-tailed)	.000	.
		df	432	0

Cross tabs OUTPUT: 73 HYPOTHESIS: 92.1

Mental Health Category * Emotional Competence category Cross tabulation

			Emotional Competence category					Total
			Highly Incompetent	Incompetent	Average	Competent	Highly Competent	
Mental Health Category	Very Poor	Count	0	5	0	0	0	5
		% within MH Category	.0%	100.0%	.0%	.0%	.0%	100.0%
		% within El C category	.0%	16.1%	.0%	.0%	.0%	1.1%
		% of Total	.0%	1.1%	.0%	.0%	.0%	1.1%
	Poor	Count	1	15	33	3	0	52
		% within M H Category	1.9%	28.8%	63.5%	5.8%	.0%	100.0%
		% within E C category	100.0%	48.4%	12.0%	3.8%	.0%	11.9%
		% of Total	.2%	3.4%	7.6%	.7%	.0%	11.9%
	Average	Count	0	7	122	21	6	156
		% within M H Category	.0%	4.5%	78.2%	13.5%	3.8%	100.0%
		% within E C category	.0%	22.6%	44.5%	26.6%	11.8%	35.8%
		% of Total	.0%	1.6%	28.0%	4.8%	1.4%	35.8%
	Good	Count	0	4	102	36	19	161
		% within M H Category	.0%	2.5%	63.4%	22.4%	11.8%	100.0%
		% within E C category	.0%	12.9%	37.2%	45.6%	37.3%	36.9%
		% of Total	.0%	.9%	23.4%	8.3%	4.4%	36.9%
	Very good	Count	0	0	17	19	26	62
		% within MH Category	.0%	.0%	27.4%	30.6%	41.9%	100.0%
		% within EC category	.0%	.0%	6.2%	24.1%	51.0%	14.2%
		% of Total	.0%	.0%	3.9%	4.4%	6.0%	14.2%
Total		Count	1	31	274	79	51	436
		% within M H Category	.2%	7.1%	62.8%	18.1%	11.7%	100.0%
		% within El C category	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	.2%	7.1%	62.8%	18.1%	11.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	212.240(a)	16	.000
Likelihood Ratio	154.446	16	.000
Linear-by-Linear Association	113.769	1	.000
N of Valid Cases	436		

a 11 cells (44.0%) have expected count less than 5. The minimum expected count is .01.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.572			.000
Interval by Interval	Pearson's R	.511	.036	12.398	.000(c)
Ordinal by Ordinal	Spearman Correlation	.490	.039	11.702	.000(c)
N of Valid Cases		436			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Hypothesis: 91

The null hypothesis that there is no significant correlation between Mental Health and Self-actualization is rejected (Output. 72, Hypothesis: 91). All the partial correlations between Mental Health and Self-actualization are significant when all other personality variables are statistically controlled. This means that good Mental Health facilitates Self-actualization. As the cross tabulation suggests, the 'Very Good' MH-Category has maximum proportion of Ss in the 'High' category of Self – actualization (Output. 72, Hypothesis: 91.1)

A number of findings as discussed in Review of Literature have shown positive correlation between SEA and MH. The finding of present research also gives further empirical support to it.

Hypothesis: 92

The null hypothesis that there is no significant correlation between EC and MH is rejected (Output. 73, Hypothesis: 92). All the partial correlations between EC and MH are significant when all other personality variables are statistically controlled. The cross tabulations of EC and MH categories suggests that the 'Very Good' MH category has maximum proportion of Ss in 'Highly Competent' category of Emotional competence. Thus, high EC is correlated with high MH. Rowan D. G. et al (1995) found positive correlation between empathy and marital satisfaction, implying better MH. Thus present study gives indirect support to Rowan's study.

Partial Corr: OUTPUT: 74 HYPOTHESIS: 93

Correlations

Control Variables			**Mental Health**	**Locus of Control category**
Emotional Competence & Self-Actualization & Personal Values & Androgyny	Mental Health	Correlation	1.000	.036
		Significance (2-tailed)	.	.466
		df	0	408
	Locus of Control category	Correlation	.036	1.000
		Significance (2-tailed)	.466	.
		df	408	0

Partial Corr

Correlations

Control Variables			Mental Health	Locus of Control category
Self-Actualization	Mental Health	Correlation	1.000	.095
		Significance (2-tailed)	.	.051
		df	0	417
	Locus of Control category	Correlation	.095	1.000
		Significance (2-tailed)	.051	.
		df	417	0

Partial Corr

Correlations

Control Variables			Locus of Control category	Mental Health Category
Emotional Competence category	Locus of Control category	Correlation	1.000	.100
		Significance (2-tailed)	.	.040
		df	0	419
	Mental Health Category	Correlation	.100	1.000
		Significance (2-tailed)	.040	.
		df	419	0

Partial Corr

Correlations

Control Variables			Mental Health	Locus of Control category
Self-Actualization	Mental Health	Correlation	1.000	.095
		Significance (2-tailed)	.	.051
		df	0	417
	Locus of Control category	Correlation	.095	1.000
		Significance (2-tailed)	.051	.
		df	417	0

Partial Corr

Correlations

Control Variables			Mental Health	Locus of Control category
Personal Values	MH	Correlation	1.000	.135
		Significance (2-tailed)	.	.006
		df	0	416
	Locus of Control category	Correlation	.135	1.000
		Significance (2-tailed)	.006	.
		df	416	0

Partial Corr

Correlations

Control Variables			Mental Health	Locus of Control category
Androgyny	Mental Health	Correlation	1.000	.128
		Significance (2-tailed)	.	.009
		df	0	418
	Locus of Control category	Correlation	.128	1.000
		Significance (2-tailed)	.009	.
		df	418	0

Cross tabs OUTPUT: 74 HYPOTHESIS: 93.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Mental Health Category * Locus of Control category	422	56.1%	330	43.9%	752	100.0%

Mental Health Category * Locus of Control category Cross tabulation

			Locus of Control category		Total
			External	Internal	
Mental Health Category	Very Poor	Count	1	4	5
		% within Mental Health Category	20.0%	80.0%	100.0%
		% within Locus of Control category	1.4%	1.1%	1.2%
		% of Total	.2%	.9%	1.2%
	Poor	Count	13	37	50
		% within Mental Health Category	26.0%	74.0%	100.0%
		% within Locus of Control category	18.1%	10.6%	11.8%
		% of Total	3.1%	8.8%	11.8%
	Average	Count	32	116	148
		% within Mental Health Category	21.6%	78.4%	100.0%
		% within Locus of Control category	44.4%	33.1%	35.1%
		% of Total	7.6%	27.5%	35.1%
	Good	Count	22	135	157
		% within Mental Health Category	14.0%	86.0%	100.0%
		% within Locus of Control category	30.6%	38.6%	37.2%
		% of Total	5.2%	32.0%	37.2%
	Very good	Count	4	58	62
		% within Mental Health Category	6.5%	93.5%	100.0%
		% within Locus of Control category	5.6%	16.6%	14.7%
		% of Total	.9%	13.7%	14.7%
Total		Count	72	350	422
		% within Mental Health Category	17.1%	82.9%	100.0%
		% within Locus of Control category	100.0%	100.0%	100.0%
		% of Total	17.1%	82.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.992(a)	4	.027
Likelihood Ratio	11.853	4	.018
Linear-by-Linear Association	10.117	1	.001
N of Valid Cases	422		

a 2 cells (20.0%) have expected count less than 5. The minimum expected count is .85.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.159			.027
Interval by Interval	Pearson's R	.155	.046	3.216	.001(c)
Ordinal by Ordinal	Spearman Correlation	.159	.045	3.297	.001(c)
N of Valid Cases		422			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Partial Corr: OUTPUT: 75 HYPOTHESIS: 94

Correlations

Control Variables			Mental Health	Internal Locus of Control
Self-Actualization & Emotional Competence & Personal Values & Androgyny	Mental Health	Correlation	1.000	.020
		Significance (2-tailed)	.	.682
		df	0	405
	Internal Locus of Control	Correlation	.020	1.000
		Significance (2-tailed)	.682	.
		df	405	0

Partial Corr

Correlations

Control Variables			Mental Health	Internal Locus of Control
Self-Actualization	Mental Health	Correlation	1.000	.122
		Significance (2-tailed)	.	.013
		df	0	413
	Internal Locus of Control	Correlation	.122	1.000
		Significance (2-tailed)	.013	.
		df	413	0

Partial Corr

Correlations

Control Variables			Mental Health	Internal Locus of Control
Emotional Competence	Mental Health	Correlation	1.000	.017
		Significance (2-tailed)	.	.731
		df	0	416
	Internal Locus of Control	Correlation	.017	1.000
		Significance (2-tailed)	.731	.
		df	416	0

Partial Corr

Correlations

Control Variables			Mental Health	Internal Locus of Control
Personal Values	Mental Health	Correlation	1.000	.173
		Significance (2-tailed)	.	.000
		df	0	413
	Internal Locus of Control	Correlation	.173	1.000
		Significance (2-tailed)	.000	.
		df	413	0

Partial Corr

Correlations

Control Variables			Mental Health	Internal Locus of Control
Androgyny	Mental Health	Correlation	1.000	.147
		Significance (2-tailed)	.	.003
		df	0	414
	Internal Locus of Control	Correlation	.147	1.000
		Significance (2-tailed)	.003	.
		df	414	0

Univariate Analysis of Variance: OUTPUT: 75 HYPOTHESIS: 94.1

Between-Subjects Factors

		Value Label	N
Mental Health Category	0	Very Poor	4
	1	Poor	48
	2	Average	148
	3	Good	157
	4	Very good	61

Tests of Between-Subjects Effects

Dependent Variable: Internal Locus of Control

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	153.901(a)	4	38.475	2.968	.019
Intercept	17414.995	1	17414.995	1343.319	.000
Mhcat	153.901	4	38.475	2.968	.019
Error	5354.194	413	12.964		
Total	93770.000	418			
Corrected Total	5508.096	417			

a R Squared = .028 (Adjusted R Squared = .019)

Estimated Marginal Means

Mental Health Category

Dependent Variable: Internal Locus of Control

Mental Health Category	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Very Poor	14.250	1.800	10.711	17.789
Poor	13.396	.520	12.374	14.417
Average	14.392	.296	13.810	14.974
Good	14.548	.287	13.983	15.113
Very good	15.738	.461	14.831	16.644

Post Hoc Tests

Mental Health Category

Multiple Comparisons

Dependent Variable: Internal Locus of Control

LSD

(I) M H Category	(J) M H Category	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Very Poor	Poor	.85	1.874	.649	-2.83	4.54
	Average	-.14	1.824	.938	-3.73	3.44
	Good	-.30	1.823	.870	-3.88	3.29
	Very good	-1.49	1.858	.424	-5.14	2.17
Poor	Very Poor	-.85	1.874	.649	-4.54	2.83
	Average	-1.00	.598	.097	-2.17	.18
	Good	-1.15	.594	.053	-2.32	.02
	Very good	-2.34(*)	.695	.001	-3.71	-.98
Average	Very Poor	.14	1.824	.938	-3.44	3.73
	Poor	1.00	.598	.097	-.18	2.17
	Good	-.16	.413	.706	-.97	.66
	Very good	-1.35(*)	.548	.014	-2.42	-.27
Good	Very Poor	.30	1.823	.870	-3.29	3.88
	Poor	1.15	.594	.053	-.02	2.32
	Average	.16	.413	.706	-.66	.97
	Very good	-1.19(*)	.543	.029	-2.26	-.12
Very good	Very Poor	1.49	1.858	.424	-2.17	5.14
	Poor	2.34(*)	.695	.001	.98	3.71
	Average	1.35(*)	.548	.014	.27	2.42
	Good	1.19(*)	.543	.029	.12	2.26

Based on observed means.

* The mean difference is significant at the .05 level.

Hypothesis: 93

The null hypothesis that there is no significant correlation between MH and LOC is rejected (Output. 74, Hypothesis: 93). All the partial correlations between MH and LOC are found to be significant when all other personality variables are statistically controlled. The cross tabulations of MH and LOC categories suggests that both are significantly correlated and though all the MH categories have maximum proposition of Internals, the difference between the Externals and Internals increase as the MH-categories increase from 'Very Poor' to 'Very Good' (Output. 74, Hypothesis: 93.1). Maximum difference between the External and Internals is more than 85% in the 'Very Good' MH-Category. Very Good MH-Category has maximum proportion of Internals. In short, MH-Category and LOC category are significantly correlated. This is also consistent with the finding of Rao and Murthy (1984) who found that maladjustment was associated with externality.

Hypothesis: 94

The null hypothesis that there is no significant correlation between MH and Internality of LOC is rejected. (Output. 74, Hypothesis: 94). All the partial correlations between MH and Int. LOC are significant, except when EC is statistically controlled. This means that EC contributes significantly in correlating the MH and Internality of LOC. This means EC constitutes very important part of MH. For further analysis, Univariate Analysis of variance was performed for five categories of MH and with Internality of LOC as dependent variable. As the results show, Ss with different MH – Categories differ significantly on the scores of Internality of LOC. The Internality of LOC increases from Very poor, Average, Good, and Very Good MH categories respectively. In short, Internal LOC facilitates MH.

Partial Corr: OUTPUT: 76 HYPOTHESIS: 95

Correlations

Control Variables			Self-Actualization	Emotional Competence
Mental Health & Locus of Control category & Internal Locus of Control & Personal Values & Androgyny	Self-Actualization	Correlation	1.000	.124
		Significance (2-tailed)	.	.012
		df	0	404
	Emotional Competence	Correlation	.124	1.000
		Significance (2-tailed)	.012	.
		df	404	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Emotional Competence
Mental Health	Self-Actualization	Correlation	1.000	.136
		Significance (2-tailed)	.	.005
		df	0	431
	Emotional Competence	Correlation	.136	1.000
		Significance (2-tailed)	.005	.
		df	431	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Emotional Competence
Locus of Control category	Self-Actualization	Correlation	1.000	.298
		Significance (2-tailed)	.	.000
		df	0	417
	Emotional Competence	Correlation	.298	1.000
		Significance (2-tailed)	.000	.
		df	417	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Emotional Competence
Internal Locus of Control	Self-Actualization	Correlation	1.000	.290
		Significance (2-tailed)	.	.000
		Df	0	413
	Emotional Competence	Correlation	.290	1.000
		Significance (2-tailed)	.000	.
		Df	413	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Emotional Competence
Personal Values	Self-Actualization	Correlation	1.000	.303
		Significance (2-tailed)	.	.000
		df	0	422
	Emotional Competence	Correlation	.303	1.000
		Significance (2-tailed)	.000	.
		df	422	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Emotional Competence
Androgyny	Self-Actualization	Correlation	1.000	.253
		Significance (2-tailed)	.	.000
		df	0	430
	Emotional Competence	Correlation	.253	1.000
		Significance (2-tailed)	.000	.
		Df	430	0

Cross tabs: OUTPUT: 76 HYPOTHESIS: 95.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Emotional Competence category * Self-Actualization Category	437	58.1%	315	41.9%	752	100.0%

Emotional Competence category * Self-Actualization Category Cross tabulation

			Self-Actualization Category			Total
			Low	Medium	High	
Emotional Competence category	Highly Incompetent	Count	0	1	0	1
		% within Emotional Competence category	.0%	100.0%	.0%	100.0%
		% within Self-Actualization Category	.0%	.4%	.0%	.2%
		% of Total	.0%	.2%	.0%	.2%
	Incompetent	Count	10	17	4	31
		% within Emotional Competence category	32.3%	54.8%	12.9%	100.0%
		% within Self-Actualization Category	10.6%	7.6%	3.3%	7.1%
		% of Total	2.3%	3.9%	.9%	7.1%
	Average	Count	67	146	62	275
		% within Emotional Competence category	24.4%	53.1%	22.5%	100.0%
		% within Self-Actualization Category	71.3%	65.5%	51.7%	62.9%
		% of Total	15.3%	33.4%	14.2%	62.9%
	Competent	Count	11	36	32	79
		% within Emotional Competence category	13.9%	45.6%	40.5%	100.0%
		% within Self-Actualization Category	11.7%	16.1%	26.7%	18.1%
		% of Total	2.5%	8.2%	7.3%	18.1%
	Highly Competent	Count	6	23	22	51
		% within Emotional Competence category	11.8%	45.1%	43.1%	100.0%
		% within Self-Actualization Category	6.4%	10.3%	18.3%	11.7%
		% of Total	1.4%	5.3%	5.0%	11.7%
Total		Count	94	223	120	437
	% within Emotional Competence category		21.5%	51.0%	27.5%	100.0%
	% within Self-Actualization Category		100.0%	100.0%	100.0%	100.0%
	% of Total		21.5%	51.0%	27.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.433(a)	8	.003
Likelihood Ratio	23.767	8	.003
Linear-by-Linear Association	19.302	1	.000
N of Valid Cases	437		

a 3 cells (20.0%) have expected count less than 5. The minimum expected count is .22.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.226			.003
Interval by Interval	Pearson's R	.210	.045	4.489	.000(c)
Ordinal by Ordinal	Spearman Correlation	.220	.045	4.699	.000(c)
N of Valid Cases		437			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Partial Corr: OUTPUT: 77 HYPOTHESIS: 96

Correlations

Control Variables			Self-Actualization	Locus of Control category
Mental Health & Emotional Competence & Personal Values & Androgyny	Self-Actualization	Correlation	1.000	.089
		Significance (2-tailed)	.	.071
		df	0	408
	Locus of Control category	Correlation	.089	1.000
		Significance (2-tailed)	.071	.
		df	408	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Locus of Control category
Mental Health	Self-Actualization	Correlation	1.000	.099
		Significance (2-tailed)	.	.044
		df	0	417
	Locus of Control category	Correlation	.099	1.000
		Significance (2-tailed)	.044	.
		df	417	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Locus of Control category
Emotional Competence	Self-Actualization	Correlation	1.000	.098
		Significance (2-tailed)	.	.045
		df	0	417
	Locus of Control category	Correlation	.098	1.000
		Significance (2-tailed)	.045	.
		df	417	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Locus of Control category
Personal Values	Self-Actualization	Correlation	1.000	.136
		Significance (2-tailed)	.	.006
		df	0	413
	Locus of Control category	Correlation	.136	1.000
		Significance (2-tailed)	.006	.
		df	413	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Locus of Control category
Androgyny	Self-Actualization	Correlation	1.000	.123
		Significance (2-tailed)	.	.012
		df	0	421
	Locus of Control category	Correlation	.123	1.000
		Significance (2-tailed)	.012	.
		df	421	0

Cross tabs: OUTPUT: 77 HYPOTHESIS: 96.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Self-Actualization Category * Locus of Control category	428	56.9%	324	43.1%	752	100.0%

Self-Actualization Category * Locus of Control category Cross tabulation

			Locus of Control category		Total
			External	Internal	
Self-Actualization Category	Low	Count	22	69	91
		% within Self-Actualization Category	24.2%	75.8%	100.0%
		% within Locus of Control category	30.6%	19.4%	21.3%
		% of Total	5.1%	16.1%	21.3%
	Medium	Count	37	182	219
		% within Self-Actualization Category	16.9%	83.1%	100.0%
		% within Locus of Control category	51.4%	51.1%	51.2%
		% of Total	8.6%	42.5%	51.2%
	High	Count	13	105	118
		% within Self-Actualization Category	11.0%	89.0%	100.0%
		% within Locus of Control category	18.1%	29.5%	27.6%
		% of Total	3.0%	24.5%	27.6%
Total		Count	72	356	428
		% within Self-Actualization Category	16.8%	83.2%	100.0%
		% within Locus of Control category	100.0%	100.0%	100.0%
		% of Total	16.8%	83.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.360(a)	2	.042
Likelihood Ratio	6.347	2	.042
Linear-by-Linear Association	6.308	1	.012
N of Valid Cases	428		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.31.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx . T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.121			.042
Interval by Interval	Pearson's R	.122	.048	2.527	.012(c)
Ordinal by Ordinal	Spearman Correlation	.121	.047	2.520	.012(c)
N of Valid Cases		428			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Hypothesis: 95

The null hypothesis that there is no significant correlation between EC and Self-actualization is rejected. (Output. 76, Hypothesis: 95). All the partial correlations between EC and SEA are found to be significant when all other personality variables are statistically controlled. The cross tabulation of SEA – category and EC – category suggests that both are significantly correlated and the Highly competent Ss have maximum proportion of Ss in 'High' Self actualization, if compared with other EC-categories within the SEA category. In short, better EC is correlated with higher Self-actualization. This study substantiates the finding of Rowan D. G. et al (1984) where empathy and SEA were found to correlate.

Hypothesis: 96

The null hypothesis that there is no significant correlation between self -actualization and LOC is rejected (Output. 77, Hypothesis: 96). All the partial correlations between the two are significant. The cross tabulations of SEA – Category and LOC category suggests that the 'High' SEA – Category had maximum proportion of Internals as

compared to ‘Medium’ and ‘Low’ SEA category. (Output. 77, Hypothesis: 96.1)

Partial Corr: OUTPUT: 78 HYPOTHESIS: 97

Correlations

Control Variables			Self-Actualization	Internal Locus of Control
Mental Health & Emotional Competence & Personal Values & Androgyny	Self-Actualization	Correlation	1.000	.055
		Significance (2-tailed)	.	.269
		df	0	405
	Internal Locus of Control	Correlation	.055	1.000
		Significance (2-tailed)	.269	.
		df	405	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Internal Locus of Control
Emotional Competence	Self-Actualization	Correlation	1.000	.042
		Significance (2-tailed)	.	.399
		df	0	413
	Internal Locus of Control	Correlation	.042	1.000
		Significance (2-tailed)	.399	.
		df	413	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Internal Locus of Control
Personal Values	Self-Actualization	Correlation	1.000	.120
		Significance (2-tailed)	.	.015
		df	0	410
	Internal Locus of Control	Correlation	.120	1.000
		Significance (2-tailed)	.015	.
		df	410	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Internal Locus of Control
Androgyny	Self-Actualization	Correlation	1.000	.101
		Significance (2-tailed)	.	.040
		df	0	417
	Internal Locus of Control	Correlation	.101	1.000
		Significance (2-tailed)	.040	.
		df	417	0

Partial Corr

Correlations

Control Variables			Self-Actualization	Internal Locus of Control
Mental Health	Self-Actualization	Correlation	1.000	.064
		Significance (2-tailed)	.	.195
		df	0	413
	Internal Locus of Control	Correlation	.064	1.000
		Significance (2-tailed)	.195	.
		df	413	0

Univariate Analysis of Variance: OUTPUT: 78 HYPOTHESIS: 97.1

Between-Subjects Factors

		Value Label	N
Self-Actualization Category	0	Low	89
	1	Medium	218
	2	High	117

Tests of Between-Subjects Effects

Dependent Variable: Internal Locus of Control

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	38.380(a)	2	19.190	1.459	.234
Intercept	78423.496	1	78423.496	5963.898	.000
seacate	38.380	2	19.190	1.459	.234
Error	5536.026	421	13.150		
Total	95476.000	424			
Corrected Total	5574.406	423			

a R Squared = .007 (Adjusted R Squared = .002)

Estimated Marginal Means

Self-Actualization Category

Dependent Variable: Internal Locus of Control

Self-Actualization Category	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Low	14.247	.384	13.492	15.003
Medium	14.436	.246	13.953	14.919
High	15.034	.335	14.375	15.693

Post Hoc Tests

Self-Actualization Category

Multiple Comparisons

Dependent Variable: Internal Locus of Control
LSD

(I) Self-Actualization Category	(J) Self-Actualization Category	Mean Difference (I-J)	Std. Error	Sig.
Low	Medium	-.19	.456	.679
	High	-.79	.510	.124
Medium	Low	.19	.456	.679
	High	-.60	.416	.151
High	Low	.79	.510	.124
	Medium	.60	.416	.151

Based on observed means.

Partial Corr: OUTPUT: 79 HYPOTHESIS: 98

Correlations

Control Variables			Emotional Competence	Locus of Control category
Mental Health & Self-Actualization & Personal Values & Androgyny	Emotional Competence	Correlation	1.000	.066
		Significance (2-tailed)	.	.186
		df	0	408
	Locus of Control category	Correlation	.066	1.000
		Significance (2-tailed)	.186	.
		df	408	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Locus of Control category
Mental Health	Emotional Competence	Correlation	1.000	.061
		Significance (2-tailed)	.	.209
		df	0	420
	Locus of Control category	Correlation	.061	1.000
		Significance (2-tailed)	.209	.
		df	420	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Locus of Control category
Self-Actualization	Emotional Competence	Correlation	1.000	.102
		Significance (2-tailed)	.	.036
		df	0	417
	Locus of Control category	Correlation	.102	1.000
		Significance (2-tailed)	.036	.
		df	417	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Locus of Control category
Personal Values	Emotional Competence	Correlation	1.000	.135
		Significance (2-tailed)	.	.006
		df	0	416
	Locus of Control egory	Correlation	.135	1.000
		Significance (2-tailed)	.006	.
		df	416	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Locus of Control category
Androgyny	Emotional Competence	Correlation	1.000	.132
		Significance (2-tailed)	.	.007
		df	0	418
	Locus of Control category	Correlation	.132	1.000
		Significance (2-tailed)	.007	.
		df	418	0

Cross tabs: OUTPUT: 79 HYPOTHESIS: 98.1

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Emotional Competence category * Locus of Control category	423	56.3%	329	43.8%	752	100.0%

Emotional Competence category * Locus of Control category Cross tabulation

			Locus of Control category		Total
			External	Internal	
Emotional Competence category	Highly Incompetent	Count	0	1	1
		% within Emotional Competence category	.0%	100.0%	100.0%
		% within Locus of Control category	.0%	.3%	.2%
		% of Total	.0%	.2%	.2%
	incompetent	Count	8	21	29
		% within Emotional Competence category	27.6%	72.4%	100.0%
		% within Locus of Control category	11.1%	6.0%	6.9%
		% of Total	1.9%	5.0%	6.9%
	Average	Count	53	213	266
		% within Emotional Competence category	19.9%	80.1%	100.0%
		% within Locus of Control category	73.6%	60.7%	62.9%
		% of Total	12.5%	50.4%	62.9%
	Competent	Count	6	71	77
		% within Emotional Competence category	7.8%	92.2%	100.0%
		% within Locus of Control category	8.3%	20.2%	18.2%
		% of Total	1.4%	16.8%	18.2%
	Highly Competent	Count	5	45	50
		% within Emotional Competence category	10.0%	90.0%	100.0%
		% within Locus of Control category	6.9%	12.8%	11.8%
		% of Total	1.2%	10.6%	11.8%
Total		Count	72	351	423
		% within Emotional Competence category	17.0%	83.0%	100.0%
		% within Locus of Control category	100.0%	100.0%	100.0%
		% of Total	17.0%	83.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.473(a)	4	.033
Likelihood Ratio	11.492	4	.022
Linear-by-Linear Association	7.726	1	.005
N of Valid Cases	423		

a 3 cells (30.0%) have expected count less than 5. The minimum expected count is .17.

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.155			.033
Interval by Interval	Pearson's R	.135	.043	2.802	.005(c)
Ordinal by Ordinal	Spearman Correlation	.147	.044	3.059	.002(c)
N of Valid Cases		423			

a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
c Based on normal approximation.

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.155			.033
Interval by Interval	Pearson's R	.135	.043	2.802	.005[c]
Ordinal by Ordinal	Spearman Correlation	.147	.044	3.059	.002[c]
N of Valid Cases		423			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Univariate Analysis of Variance: OUTPUT: 79 HYPOTHESIS: 98.2

Between-Subjects Factors

		Value Label	N
Locus of Control category	0	External	72
	1	Internal	351

Tests of Between-Subjects Effects

Dependent Variable: Emotional Competence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8032.927(a)	1	8032.927	7.648	.006
Intercept	18192418.667	1	18192418.667	17319.692	.000
loccate	8032.927	1	8032.927	7.648	.006
Error	442213.886	421	1050.389		
Total	33550197.000	423			
Corrected Total	450246.813	422			

a R Squared = .018 (Adjusted R Squared = .016)

Estimated Marginal Means

Locus of Control category

Dependent Variable: Emotional Competence

Locus of Control category	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
External	270.111	3.820	262.603	277.619
Internal	281.707	1.730	278.306	285.107

Partial Corr: OUTPUT: 80 HYPOTHESIS: 99

Correlations

Control Variables			Emotional Competence	Internal Locus of Control
Mental Health & Self-Actualization & Personal Values & Androgyny	Emotional Competence	Correlation	1.000	.163
		Significance (2-tailed)	.	.001
		df	0	405
	Internal Locus of Control	Correlation	.163	1.000
		Significance (2-tailed)	.001	.
		df	405	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Internal Locus of Control
Mental Health	Emotional Competence	Correlation	1.000	.158
		Significance (2-tailed)	.	.001
		df	0	416
	Internal Locus of Control	Correlation	.158	1.000
		Significance (2-tailed)	.001	.
		df	416	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Internal Locus of Control
Self-Actualization	Emotional Competence	Correlation	1.000	.197
		Significance (2-tailed)	.	.000
		df	0	413
	Internal Locus of Control	Correlation	.197	1.000
		Significance (2-tailed)	.000	.
		df	413	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Internal Locus of Control
Personal Values	Emotional Competence	Correlation	1.000	.232
		Significance (2-tailed)	.	.000
		df	0	413
	Internal Locus of Control	Correlation	.232	1.000
		Significance (2-tailed)	.000	.
		df	413	0

Partial Corr

Correlations

Control Variables			Emotional Competence	Internal Locus of Control
Androgyny	Emotional Competence	Correlation	1.000	.218
		Significance (2-tailed)	.	.000
		df	0	414
	Internal Locus of Control	Correlation	.218	1.000
		Significance (2-tailed)	.000	.
		df	414	0

Hypothesis: 97

The null hypothesis that there is no significant correlation between Self -actualization and Internality of LOC is accepted (Output. 78, Hypothesis: 97). Though LOC category-wise analysis suggested that Internal LOC is significantly associated with High Self-actualization (Output. 77, Hypothesis: 96.1), the amount of Internality of LOC is not significantly correlated with SEA.

When the effects of MH and EC are bracketed statistically, the correlation between SEA and Internality of LOC becomes non-significant otherwise correlation between the two is significant. This means that EC and MH contribute significantly in making the correlation between SEA and Int. LOC significant. The Univariate ANOVA also shows that SEA category has no significant effect on the scores of Internality of LOC. (Output. 78, Hypothesis: 97.1), Though the mean scores of Int. Loc increase from Low, Medium to High category of Self-actualization, the difference among them is not statistically significant. This means that the Self-actualized do significantly tend to be Internals rather than externals, but the amount of Internality of LOC does not increase with Self-actualization.

Hypothesis: 98

The null hypothesis that there is no significant correlation between Emotional competence and LOC is rejected (Output. 79, Hypothesis: 98). All the partial correlations between EC and LOC are significant, except when MH is statistically controlled. When EC category was bracketed, MH – category yielded significant correlation with LOC, but

when MH is bracketed, EC is not found to be significantly correlated with LOC. Thus, correlation between MH and LOC is more functional. However, the category wise analysis suggests that the 'Competent' and the 'Highly Competent' category had significantly higher proportion of Internal LOC. Thus, EC – category and LOC category are significantly correlated. (Output. 79, Hypothesis: 98.1) Similarly, if we take EC- Score as dependent variable and LOC category as Independent variable, then ANOVA results also show that LOC category has significant effect on EC. (Output. 79, Hypothesis: 98.2). The mean difference suggests that Internals have significantly higher EC – Score.

Hypothesis: 99

The null hypothesis that there is no significant correlation between EC and Internality of LOC is rejected (Output. 80, Hypothesis: 99). All the partial correlations between EC and Int. LOC are found to be significant. Thus, Internality of LOC facilitates EC and EC correlates with Internality of LOC.

CHAPTER – 5

SUMMARY & CONCLUSIONS

SUMMARY AND CONCLUSION

Because any empirical research gets its full significance by answering the theoretical questions about the research problem, in the first chapter of theoretical background, the need for theoretical analysis, and the theoretical background of Psychological Androgyny were discussed. The in-depth analysis on any problem necessarily leads to interdisciplinary analysis. This being so, here also the research problem of Psychological Androgyny was discussed theoretically at multi-disciplinary levels. It was found that Psychological Androgyny was the direct logical derivation of the post-modern literary theory of Derrida's Deconstruction with its feminist implication. Derrida's Deconstruction constituted the Third wave of Feminism. Therefore, it was necessary to analyze the sociological history of feminist thinking from first wave of feminism to the third wave of feminism. Thus, in the first chapter sociological theories of feminism, literary theory of Derrida and finally the psychological analysis of Bem's concept of Androgyny were discussed.

Sandra Bem first introduced and operationalized the concept of Psychological Androgyny, which was not only theoretically significant but praxiologically also it gave new impetus to feminist thinking and feminist movement too, because it propounded that it was possible, rather, socially and individually more desirable that each sex transcends sex stereotypes and both the sexes may develop the characteristics of both the sexes within one's own self. Such a person, having the high actualization of the Masculinity and Feminity both within one's self is called Androgynous person, irrespective of

one's biological sex. The whole controversy of sexism, based on biological essentialism, becomes redundant with the introduction of gender-neutral concept of Psychological Androgyny. Further Bem contented that androgyny is socially more desirable than the sex stereotypes, because androgyny is correlated with better adjustment and better Mental Health. In modern technocratic society with globalization, it was the demand of the age that both the sexes may develop and take the roles of both the sexes. Thus, Bem revolutionalized the whole feminist thinking by her concept of Psychological Androgyny.

The relevance of Bem's concept of Psychological Androgyny was thus discussed. Bem's concept of Psychological Androgyny and its measurement through BSRI (Bem's Sex-Role Inventory was discussed in the light of previous measuring instruments of masculinity and femininity. Further development in the operationalization of androgyny by Spence and her team was also discussed. Spence et.al. developed PAQ (Personal Attribute Questionnaire) to measure Psychological Androgyny. BSRI and PAQ both were compared and discussed in the light of theoretical agreement and differences of Bem and Spence were discussed.

Finally the theoretical issues of Bipolarity versus Dualistic approach, and Unidimensionality versus Multidimensionality were discussed, Joan Erickson's hypothesis about androgyny among saints and artists was pointed out and in the light of this theoretical background, relevance of present research on the 'study of some personality correlates of androgyny among saints and artists' was pointed out. The justification for selecting Mental Health, Emotional

Competence, Self-actualization, Locus of Control, and Personal Values as the personality correlates of Androgyny was discussed in the first chapter.

In the second chapter of Review of Literature almost 450 studies related to Androgyny and the personality correlates of androgyny selected in present research, were reviewed and meaningfully classified. These studies constituted the published researches in various international journals as endowed by APA Psych Info soft ware of the year 1999. Review of literature also included studies published on various websites and in the Ph.D. dissertations on problems related to present research.

In the third chapter of Problem and Methodology, the issues of research methodology of present research were discussed. The main problem of present research was to analyze some personality correlates of Androgyny among saints and artists. The personality correlates selected were Mental Health, Emotional Competence, Self-actualization, Locus of Control, and Personal Values. Secondarily, the problem of present research was to verify empirically Joan Erickson's hypothesis that 'saints and artists are androgynous persons'. It was this Joan's statement that was the basis for selecting saints and artists as the subjects of present research. The research design selected for present research was quasi-experimental and correlational. The Independent variables of present research were of S-type. There were eight independent variables in present study, namely, Sex-Role Orientation (SRO), Type of Person (TP), Type of Religion (TR), Type of art (TA), Years of experience, Age, Gender, and Education. The Dependent variables of present research were

Mental Health, Emotional Competence, Self-actualization, Locus of Control, Internality of Locus of Control, and Personal Values. The sample included total 249 saints from four major religions, namely, Hinduism, Buddhism, Christianity, and Jainism; 180 artists from Painting/sculpture, Dance/drama, and Music, and 132 normals who were non-saints and non-artists. Thus total sample comprised of 561 subjects. The sampling used here was non-probabilistic, purposive sampling. Total 103 hypotheses, related to eight independent and six dependent variables, were developed with reference to specific research interest and the statistical tools applied. The tools used for data collection were Bem's Sex-role Inventory (BSRI) for measuring Androgyny, The Mental Health Inventory (MHI) by Dr. Jagdish and Dr. A.K.Srivastava, Self-Actualization Inventory by Dr. K.N. Sharma Rotter's Locus of Control scale by Anandkumar and Dr.S.N. Srivastava, Emotional Competence Scale by Dr.Harish Sharma and Rajiv Lochan Bhardwaj and Personal Value Questionnaire by Dr. G.P.Sherry and Dr. R.P. Verma. All the questionnaires were prepared in English and Hindi versions, as the sample was from diverse background. The standardized versions in both the languages were available for MHI, EC Scale, and PVQ. BSRI was available in English, so its Hindi translation was made by three experts knowing both the languages and its reliability was calculated. SEAI and Rotter's Locus of Control scale were available in Hindi versions and their English translation was done by experts and their reliability was also computed. Questionnaire and the Interview methods were used for data collection. The Data obtained through the above-stated questionnaires were scored as per the respective Manuals and finally

statistical analysis of the data was done through ANOVA, Chi-square, Contingency 'C', Eta correlation, and the Partial correlation for statistical control. The SPSS 13.0 version was used for statistical analysis. The discussions of the results answered following research questions raised through theoretical controversy and through review of literature as under;

1. The review of literature has shown the necessity to answer the question whether Androgyny facilitates the Mental Health or the Masculinity facilitates the Mental Health. A group of researchers argued that wherever Androgyny is found to be facilitating MH it is because of the high Masculinity in it only. So it was an open question which of the SRO is more effective for MH. Present research clearly substantiated the contention that Androgyny facilitates MH. Not only for MH but for EC and SEA also, Androgyny was consistently and significantly found to have most facilitating effects. Thus present research constituted one more replication of the finding that Androgyny facilitates MH and it gets more sound empirical support by its observed positive effect on EC and SEA.

2. Another important finding of present research was that it denied the previous finding that feminity is associated with less or ill Mental Health. Rather, present research implied Feminity to be more desirable trait if it combined with spirituality. Saints reflected more Feminine orientation underlying divine feminine principle of Love of Jesus and Compassion of Buddha. Especially Christian saints and Buddhist saints showed significantly higher feminity. The Hindu and Jain saints also had higher proportion of feminine SRO after

Androgynous. This higher feminity observed in saints did not indicate stereotype feminity, because the saints were significantly more androgynous than normals. In other words, within SRO, saints were significantly more androgynous (35.7%) than the normals (23.4%), but saints' this higher Androgyny. (35.7%) was also significantly less than the feminine SRO (57.1%) within saints. Thus greater androgyny among saints make them above normal and then if we find more feminity among saints, it can legitimately said to be above normal feminity and not just stereotyped feminity. Against Kohlberg's cognitive moral development theory underlying masculine bias of rationality, Gilligan has argued for typical feminine rationality underlying the logic of care and concern against the masculine logic of justice. Thus feminity has its own above normal potentials too, which has been implicitly highlighted in present research through significantly higher feminine SRO among saints. This interpretation may be controversial, but it does have empirical basis. This finding goes parallel to the theoretical position of Cultural Feminism emphasizing women specificity. However, the women specificity pointed out here is not contradictory to Androgyny as is normal position of Cultural feminism.

4. One very important conclusion of present research is that feminity is not correlated with ill mental health as discussed above. Further point which need to be clarified is that all our mental measurements emphasized self-esteem as the major criterion of mental health, which itself underlied masculine bias, as discussed in review of literature. To quote again,

Two subsequent critics of Bem's research on androgyny (Locksley and Colten, 1979; Taylor and Hall, 1982) concluded that there was clear evidence for the association of masculine traits with mental health measures of adjustment, but no specific link with androgyny: androgynous people tend to be well adjusted because they have masculine traits. (March et al., 1987; Spence and Helmreich, 1978; Spence et al., 1975), a link which is partly spurious, since many masculine traits are similar to items used to measure self-esteem (archer, 1986; Baldwin et al., 1986). Perhaps more interestingly subsequent study demonstrated that men and women appear to derive their self-esteem from different sources, men from a belief in their abilities and women from their attachments and connections with significant others." (Archer J. & Lloyd B. 2002:32)

Thus, mental measurement overweight self-esteem, which itself underlies masculine bias. So feminine SRO can't be associated with ill mental health. From the feminist point-of-view, this association of feminity with ill MH, based on biased measurements, are strongly debatable.

Additionally, it is non-disputed conclusion that androgynous SRO is positively associated with higher Mental Health. The criticisms that higher MH of androgynous is due to higher masculinity are not substantiated in many pf previous finding and also in present finding. But one very interesting finding and conclusion from the feminist point -of-view, is that females have significantly higher proportions of androgynous SRO than the males. (Output: 33, Hypothesis: 50)

Thus females tend to be more androgynous than males, which implies higher role-flexibility, better adjustment, and higher mental health. Though Androgyny did not substantiated this, still significantly lower proportions of Undifferentiated SRO still suggests better MH, because Undifferentiated SRO has been, undisputedly associated with less MH and less adjustment scoring. In short, neither biological feminity nor psychological feminity can be associated with inferior MH. This constitutes an important revelation of present research from feminist point-of-view.

4. Another very important conclusion of present research is that art plays very significant role in personality development. Almost in all the personality variables selected here, art has been consistently and quite significantly found higher in facilitating androgyny, mental health, emotional competence, and self-actualization. It is very interesting that in all these personality variables art invariably yielded higher scores, not only that but also, these scores were statistically significant.

Additionally, the distance between the scores of artists from other types of persons upon all these personality variables was also noticeably greater. So the psychological impact of art is positive and profound. Repeatedly and consistently it was found that art always superseded even spirituality in facilitating personality growth.

Art facilitates mental health, which means that art facilitates all the six components of mental health, namely, positive self-evaluation (PSE), perception of reality (PR), integration of personality (IP), autonomy (AUT), group-oriented attitude (GOA), environmental

mastery (EM). As the multivariate analysis of these five factors (Outputsumm) suggested, in all the factors artists have highest scores and in case of positive self-evaluation and autonomy artists' scores are significantly higher than the saints and normals. As Dr. Jagdish and Dr. A.K. Srivastava defined the positive self-evaluation in the Manual for MHI, which was used here PSE includes self-confidence, self-acceptance, self-identity, feeling of worthiness realization of one's potentials etc. This implies that art facilitates positive self-concept; confidence, and self-acceptance, art increases feeling of worthiness and leads to realization of one's potentials.

Similarly, by developing Autonomy within the individual, art develops internal standards of one's action, dependence for one's own development upon one's own self, rather than upon others. All these developments are significantly fostered by art. However, though non-significantly, but art does develops one's ability to get along with others, to work with others, to find one's own recreation as the Group-Oriented Attitude suggests. Similarly, art increases efficiency in meeting situational demands, ability to work and play, the ability to take responsibilities and capacity for adjustment as the Environmental Mastery implied. In this way, by significantly facilitating mental health, art fosters quite a number of positive mental changes, which enriches one's inner growth of personality and outer adjustments.

Similarly, by cultivating emotional competence, art promotes adequate depth of feeling (ADF), adequate expression and control of emotions (AECE), ability to function with emotions (AFE), ability to cope with problem emotions (ACPE) and encouragement of positive

emotions. In some of the factors of emotional competence, spirituality has been found to be more effective. However, especially in adequate expression and control of emotions, art was most effective. Similarly, art facilitated one's ability to function with emotions. Overall, art is found to facilitate emotional competence maximum.

Self-actualization indicates highest level of personality development according to Maslow. After the gratification of physiological needs, security needs, needs for love and belongingness, and the esteem needs, the growth motivation reflects in the form of self-actualization needs. Thus, self-actualization represents highest and above-normal personality development. As Maslow defines self-actualization, " Even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop, unless the individual is doing what *he* individually is, fitted for. A musician must make music; an artist must paint, a poet must write, if he is to be ultimately at peace with himself. What a man *can* be, he *must* be. He must be true to his own nature. This need we may call self-actualization… It refers to man's desire for self-fulfillment, namely, to the tendency for him to become actualized in what he potentially is. This tendency might be phrased as the desire to become more and more what one idiosyncratically is, to become everything that one is capable of becoming." (Maslow A.H. 1970:46) Thus self-actualization represents the state of Growth motivation, which develops after the gratification of all the lower level deficiency needs governed by deficiency motivation. Though lower level need gratification is necessary for the

emergence of growth motivation, after its appearance, the self-actualizing needs become “Functionally Autonomous”. Such a level of personality development, where one is motivated to actualize one’s potentials, is the state of self-actualization, which is characteristically and significantly more found among artists than among saints and normals. Thus in the context of achieving the highest level of personality development, art has got special significance.

In short, present research points to high value of worship of art for psychological betterment.

5. Another interesting conclusion of present research is that though art is indisputably facilitates a number of positive personality traits, the type of art had made no significant difference in fostering mental health, emotional competence, self-actualization, locus of control or internality of LOC. Thus art significantly contributes in cultivating androgyny, mental health emotional competence, and self-actualization but the type of art does not make a significant difference except in case of androgyny. In other words, any type of art- be it painting, sculpture, dance drama or music- is helpful in facilitating MH, EC or SEA. Type of religion had significant effect on majority of the variables, but type of art had no significant difference on majority of variables. In short, art itself is more important for personality growth not the particular type of art. This finding has great counseling and educational import for propagating wide use and worship of art in schools, colleges and in general population to enhance and raise mental health statistics in population.

6. Though art has been found to be maximum beneficial for MH, EC, and SEA, spirituality has also been found to be facilitating for all these personality variables too. Because, next to the artists, saints have scored significantly higher on some of the personality aspects than the normlas, e.g., spirituality leads to significantly higher androgyny as predicted by Erickson, and androgyny in turn, facilitates psychological advancement by promoting mental health, emotional competence, and self-actualization. Thus, spirituality helps the development of socially and individually desirable personality trait of androgyny, which underlies role flexibility and higher potential for adopting a variety of role as demanded by situation in modern globalized technocratic society. Secondly, spirituality has been found to facilitate emotional competence and especially internality of LOC. Thus present research removes the common sense belief that spirituality would take one away from reality through its other-worldliness. Rather, spirituality leads saints to root the causes of one's failures or reinforcements within one's own self, instead of rooting them in some powerful others like fate or chance.

In short, religion or spirituality does not constitute a sort of escapism or defense mechanism, as Freud believed. The results of present research clearly showed that there were no significant differences between saints and normals on mental health or on emotional competence or on self-actualization. As the results suggested only on Positive self-evaluation saints scored significantly low which was due to their under- estimation underlying perfectionist ideal as has been discussed earlier in detail. Secondly, on

Encouragement of Positive Emotions also saints scored significantly low, which was also due to the fact that the EC scale used here those wordly items to measure EPE, which were not consistent to saints' way of life, e.g. 'I like to participate with full enthusiasm in the occasions like marriage etc.' Such items were not applicable to saints who are renunciates. Thus one component of MH, i.e. PSE and one component of EC, i.e. EPE- only on these aspects saints scored significantly low than normals, which were aptly justifiable and so they can't be considered as indicative of ill MH or ill EC. On the contrary, on adequate depth of feeling (ADF) and on ability to cope with problem emotions (ACPE) saints scored significantly higher than the normals. In short, present research indicates the positive role of religion or spirituality for personality growth and psychological well - being.

Wherever there are significant differences, they are indicative of significantly positive contribution of spirituality for personality, e.g. saints and normals differed significantly on SRO or androgyny and on internality of LOC. Thus saints had significantly higher androgynous SRO than normals, which was, as discussed earlier, a positive or desirable contribution of spirituality. Similarly, significantly higher internality of LOC among saints also indicates more healthy reality orientation devoid of any escapism or projection. Thus present research points to the positive and healthy contribution of spirituality removing the pathological view of religion and spirituality.

7. Finally the concept of Psychological Androgyny underlined two theoretical controversies. First was the controversy of Bipolarity

versus Dualistic approach and second was the controversy of Unidimensionality versus Multidimensionality. The very concept of Psychological Androgyny was emerged by rejecting Bipolarity of Masculinity and Feminity. Sandra Bem and Spence, both had rejected Bipolarity view while operationalized the concept of Psychological Androgyny. Therefore present research also supported dualistic approach according to which Masculinity and Feminity are two complementary, not the bipolar aspects of personality. Therefore, according to Bipolarity principle, if one has higher score on Masculinity, then logically it follows that the person would have low score on feminity. This view was rejected by Bem and Spence both, because, they said that it is possible for the individual to score high on both the aspects, i.e. on masculinity as well as on feminity, and this was termed as Psychological Androgyny. So by using Bem's Sex-Role Inventory to measures Androgyny, which was the main topic of present research, here dualistic approach only was accepted and was supported empirically also by showing the desirability of Psychological Androgyny for personality growth through enhancement of mental health, emotional competence and self-actualization through androgyny as pointed out earlier. Thus present research supported Bem's dualistic approach and her contention about the desirability of Psychological Androgyny. About the controversy of Bem's Unidimensionality and Spence's Multidimensionality approach, present research was not directly concerned. However, by showing interconnectedness and significant inter-correlations of androgyny, mental health, emotional competence, and self-actualization, it can be said that present

research provides indirectly an empirical support to Unidimensionality.

8. Another minor but important conclusion derived from present research is that saints do not mean necessarily religious values as per the Spranger's classification. A person may be a saint and he may not be living by the religious values as measured by Personal Value Questionnaire. Or it might be that the religiosity as defined in PVQ is not necessarily the preferred values of saints. Modern saints are found to live other values like democratic or family values more than the so-called religious values as depicted and measured by PVQ.

9. Another conclusion of present research is that much more quantitative measures like age, gender, and years of experience have not much significant effects on androgyny, mental health, emotional competence, self-actualization. Only Gender had significant effect on sex-role orientation and all these three quantitative measures had significant effect on internality of LOC.

9. Education in general was found to have no significant effect on Sex-role orientation, androgyny, mental health, self-actualization, locus of control or on the internality of locus of control. Only on emotional competence education had significant effect. Even then researcher finds the findings of present research to be non-conclusive. Two reasons are behind this inconclusiveness; First is that wherever education was found to be non-significant as a main

factor, the LSDs showed some significant effects of education and wherever education was found to be significant as a main factor, the LSD was non-significant. This points to the need for further findings for conclusive decision. Secondly, the reason for majority of the non-significant results may be due to higher scoring of undergraduates. As explained earlier, the under graduates of present included a number of good saints and artists too. Such saints and artists were undergraduate in formal education but they were highly educated in their scriptures or in particular field of art. Thus indirectly, education has been found to show significant effects. Thirdly, in interaction with SRO and other variables like type of religion also, education produced significant effects.

Over all, education is found to facilitate certain personality variables, even if its effect as a main factor is non-significant. Especially in case of education of more than PG was observed to be most effective in number of cases. Therefore, researcher hesitates to conclude that education is not much significant factor. Further empirical findings are necessary for the conclusive statement on the effect of education.

In this way, above-stated conclusions can be drawn on the basis of present research.

LIMITATIONS AND SUGGESTIONS:

The limited scope of present research suggests the limitations of present research, which can be highlighted as under:

1. Androgyny could be studied at three levels—(I) Physical androgyny, (II) Psychological androgyny, and (III) Spiritual androgyny. Present research was limited to the study of psychological androgyny only.
2. Psychological androgyny could also be measured and analyzed through various masculinity/femininity (M/F) scales including Bem's BSRI and Spence's PAQ. The present research was limited only to the study of psychological androgyny as measured and analyzed through BSRI (Bem's Sex-Role Orientation Inventory).
3. A number of personality variables could be analyzed as the correlates of psychological androgyny. Present research was confined to the correlatioanl analysis of only five variables, namely, (I) Mental Health (II) Emotional Competence, (III) Self-actualization, (IV) Locus of Control, and (V) Personal Values.
4. Following the Erickson's hypothesis, present research was limited to the study of saints and artists only.
5. Saints could also be from all the eleven major religions, namely, Hinduism, Christianity, Islam, Jainism, Buddhism, Judaism, Jorashtranianism, Shintoism, Taoism, Confucianism, and Sikhism. Among all these eleven major religions, Hinduism, Christianity, Buddhism, and Jainism have been selected for present research.

6. Artists can also be from a variety of fields like dancing, painting, music, drama, sculpture, Folk-dance, photography etc. Here only painting, music, (vocal) and performing arts (of dance and drama) are only selected.
7. Over and above, religion and art, only three demographic variables of sex, age, and education had been selected as concomitant independent variables.
8. Another limitation of present research was that instead of random sampling, here purposive sampling was used within the limitations of time, money, energy, and the feasibility.
9. Because of the lengthy questionnaire including six sub-scales, the researcher, and the subject both had to make special adjustments to avoid fatigue effect.
10. APA style Manual of research report writing says that the researcher should not cite the references, which he/she has not read. Due to unavailability of some important and relevant sources of references have been quoted here secondarily but have been included in bibliography for further reading, though they have not been read directly. The researcher thought it better to yield extensive bibliography on especially Bem's and Spence's original works on Psychological androgyny. Therefore, especially books and articles by Bem and Spence have been included in bibliography, without direct reading. This also is one of the limitations of the researcher.
11. The mental measurement tools used here were prepared for normal population. Though they did served the purpose legitimately for the mental measurement of saints and artists,

researcher felt that especially in MHI, EC-Scale, and PVQ contained only some of the items, which were not directly applicable to saints. So in such items saints' responses could not represent the actual inner state of saints, which these items intend to measure. E.g. an item on EC-scale stated that 'I like to participate with enthusiasm in the entertaining programs like marriage etc.' Normally saints would score very low on this item, which was intended to measure "encouragement of positive emotions.

Thus, saints might have different ways of entertaining themselves; even then they might be wrongly interpreted on such items measuring EPE of saints and/or artists too. Though the number of such items was very, very small, may be around five to six items in total six sub-scales, and even though such items on PVQ did not affected saints' categorization on particular value, which was based on hierarchy, it does constitute a limitation of present research for subtle precision.

In short, it was tried level best to avoid confounding through maximum possible control, even then above-stated inevitable limitations comprised present research. However, these limitations are not that much profound to doubt the validity of the conclusions derived from present research.

SUGGESTIONS:

The important suggestion based on present research is that as Androgyny is theoretically very relevant and socially very desirable sex-role orientation, still further researches on the theoretical and applied aspects of androgyny are necessary, especially from the feminist and specific women studies point-of-view.

Secondly, the most scientific and popular tools to measure androgyny are Bem's Sex-Role Orientation Inventory (BSRI) and Personal Attributes Questionnaire (PAQ). Both these tests do not yield separate quantitative score for androgyny. Both these tools categorize androgyny as one of the four sex-role orientations. It would be more meaningful and useful for research if we can have a tool, which can measure only amount of androgyny within the individual in interval scale with results in score-form, rather than in frequency-form. So formulation of a scale, having same scientific vigor like that of BSRI and PVQ is necessary, which can measure androgyny in pure quantitative and score-form.

Thirdly, there should be separate mental measurement tools for the non-normal populations like saints or artists. Or there should be separate norms for such population.

Finally, majority of our researches are conducted on normal populations only. Such researches are, of course, necessary and have wider application. Even then it is researcher's humble opinion that further researches specifically focusing the psychology of so-called above-normal populations like saints, artists, scientists, philosophers, poets, writers etc. should be popularized to present an above-normal role-models for normal population. In short, researches having specific relevance from the point-of-view of humanistic psychology should also be focused and encouraged.

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APPENDICES

Appendix – A

Reliability Statistics

Appendix – B

Questionnaire (Hindi)

Appendix – C

Questionnaire (English)

APPENDICES

Reliability Statistics

Bem's Sex-Role Inventory

(BSRI Original): Hindi version

Cronbech alpha

Split- Half Reliability

BSRI: M-F Reliability

BSRI: Masculinity Reliability

BSRI: Feminity Reliability

Self-Actualization Inventory

(SEAI): English version

Cronbech Alpha

Split-Half Reliability

Locus Of Control Scale

(LOC Scale): English version

Cronbech Alpha

Split-Half Reliability.

Questionnaire (Hindi version)

Questionnaire (English version)

Reliability: BSRI Original: Output: 81. Cronbech's Alpha

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.865	.875	60

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
299.72	890.545	29.842	60

Reliability: BSRI Original: Split- Half Reliability:

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Part 1	Value	.725
		N of Items	30(a)
	Part 2	Value	.800
		N of Items	30(b)
	Total N of Items		60
Correlation Between Forms			.744
Spearman-Brown Coefficient	Equal Length		.853
	Unequal Length		.853
Guttman Split-Half Coefficient			.851

a The items are: VAR00001, VAR00002, VAR00003, VAR00004, VAR00005, VAR00006, VAR00007, VAR00008, VAR00009, VAR00010, VAR00011, VAR00012, VAR00013, VAR00014, VAR00015, VAR00016, VAR00017, VAR00018, VAR00019, VAR00020, VAR00021, VAR00022, VAR00023, VAR00024, VAR00025, VAR00026, VAR00027, VAR00028, VAR00029, VAR00030.

b The items are: VAR00031, VAR00032, VAR00033, VAR00034, VAR00035, VAR00036, VAR00037, VAR00038, VAR00039, VAR00040, VAR00041, VAR00042, VAR00043, VAR00044, VAR00045, VAR00046, VAR00047, VAR00048, VAR00049, VAR00050, VAR00051, VAR00052, VAR00053, VAR00054, VAR00055, VAR00056, VAR00057, VAR00058, VAR00059, VAR00060.

Scale Statistics

	Mean	Variance	Std. Deviation	N of Items
Part 1	148.37	233.423	15.278	30(a)
Part 2	151.35	278.130	16.677	30(b)
Both Parts	299.72	890.545	29.842	60

a The items are: VAR00001, VAR00002, VAR00003, VAR00004, VAR00005, VAR00006, VAR00007, VAR00008, VAR00009, VAR00010, VAR00011, VAR00012, VAR00013, VAR00014, VAR00015, VAR00016, VAR00017, VAR00018, VAR00019, VAR00020, VAR00021, VAR00022, VAR00023, VAR00024, VAR00025, VAR00026, VAR00027, VAR00028, VAR00029, VAR00030.

b The items are: VAR00031, VAR00032, VAR00033, VAR00034, VAR00035, VAR00036, VAR00037, VAR00038, VAR00039, VAR00040, VAR00041, VAR00042, VAR00043, VAR00044, VAR00045, VAR00046, VAR00047, VAR00048, VAR00049, VAR00050, VAR00051, VAR00052, VAR00053, VAR00054, VAR00055, VAR00056, VAR00057, VAR00058, VAR00059, VAR00060.

Reliability: Masculinity: BSRI: Output: 81

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.819	.826	20

Inter-Item Correlation Matrix

	Mas	VAR 00002	VAR 00003	VAR 00004	VAR 00005	VAR 00006	VAR 00007	VAR 00008	VAR 00009	VAR 00010	VAR 00011	VAR 00012	VAR 00013	VAR 00014	VAR 00015	VAR 00016	VAR 00017	VAR 00018	VAR 00019	VAR 00020
Mas	1.000	-.120	-.073	.215	.288	.126	-.261	.271	.149	.117	.123	.209	.134	-.141	.051	.216	.237	.123	.119	.377
VAR00002	-.120	1.000	-.022	.045	.110	-.068	.268	.081	.300	-.020	-.006	.262	-.005	.020	-.084	.192	-.033	.078	.306	-.181
VAR00003	-.073	-.022	1.000	.212	.336	.283	.381	.207	-.023	.189	.272	-.006	.158	.233	.396	.135	.019	-.148	.123	.200
VAR00004	.215	.045	.212	1.000	.446	.072	.158	.295	.149	-.082	.125	.162	.314	.161	.282	.475	.219	.130	.093	.165
VAR00005	.288	.110	.336	.446	1.000	.217	.124	.234	.169	.115	.154	.256	.099	.002	.226	.439	.044	.063	.127	.394
VAR00006	.126	-.068	.283	.072	.217	1.000	-.050	.122	.443	.083	.442	.063	.307	.388	.386	.189	.363	.195	-.114	.391
VAR00007	-.261	.268	.381	.158	.124	-.050	1.000	.178	-.004	.255	.113	.267	.235	.389	.153	.196	-.107	.003	.339	-.001
VAR00008	.271	.081	.207	.295	.234	.122	.178	1.000	.283	.104	.097	.199	.454	.210	.490	.277	.245	.263	.266	.271
VAR00009	.149	.300	-.023	.149	.169	.443	-.004	.283	1.000	-.129	.236	.216	.270	.320	.283	.143	.302	.358	.231	.101
VAR00010	.117	-.020	.189	-.082	.115	.083	.255	.104	-.129	1.000	.197	-.166	.297	.256	.041	.096	.251	.027	.177	.415
VAR00011	.123	-.006	.272	.125	.154	.442	.113	.097	.236	.197	1.000	.201	.372	.472	.255	.221	.607	.235	.109	.327
VAR00012	.209	.262	-.006	.162	.256	.063	.267	.199	.216	-.166	.201	1.000	.085	.135	.272	.100	.182	.139	.331	-.030
VAR00013	.134	-.005	.158	.314	.099	.307	.235	.454	.270	.297	.372	.085	1.000	.713	.353	.266	.436	.419	.198	.271
VAR00014	-.141	.020	.233	.161	.002	.388	.389	.210	.320	.256	.472	.135	.713	1.000	.386	.073	.386	.445	.245	.158
VAR00015	.051	-.084	.396	.282	.226	.386	.153	.490	.283	.041	.255	.272	.353	.386	1.000	.300	.176	.221	.297	.293
VAR00016	.216	.192	.135	.475	.439	.189	.196	.277	.143	.096	.221	.100	.266	.073	.300	1.000	.271	.256	.297	.182
VAR00017	.237	-.033	.019	.219	.044	.363	-.107	.245	.302	.251	.607	.182	.436	.386	.176	.271	1.000	.392	.155	.271
VAR00018	.123	.078	-.148	.130	.063	.195	.003	.263	.358	.027	.235	.139	.419	.445	.221	.256	.392	1.000	.189	.270
VAR00019	.119	.306	.123	.093	.127	-.114	.339	.266	.231	.177	.109	.331	.198	.245	.297	.297	.155	.189	1.000	-.061
VAR00020	.377	-.181	.200	.165	.394	.391	-.001	.271	.101	.415	.327	-.030	.271	.158	.293	.182	.271	.270	-.061	1.000

The covariance matrix is calculated and used in the analysis.

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
97.55	228.387	15.112	20

Reliability: Feminity

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.687	.732	20

	Fem	VAR 00022	VAR 00023	VAR 00024	VAR 00025	VAR 00026	VAR 00027	VAR 00028	VAR 00029	VAR 00030	VAR 00031	VAR 00032	VAR 00033	VAR 00034	VAR 00035	VAR 00036	VAR 00037	VAR 00038	VAR 00039	VAR 00040
Fem	1.000	.015	.107	.124	.184	-.116	.114	.166	.137	.562	.041	.468	.303	-.036	.268	.413	-.210	.261	.052	.432
VAR00022	.015	1.000	.430	.299	.158	.166	.029	.228	.331	.155	.113	.314	.164	.145	.087	.198	-.037	-.081	.152	.201
VAR00023	.107	.430	1.000	.335	.126	.097	.088	.136	.138	.171	-.082	.523	.078	.054	.147	.059	-.252	-.075	.170	.169
VAR00024	.124	.299	.335	1.000	-.074	.161	.002	.078	-.126	.099	.261	.240	.330	.185	.227	.128	-.017	.008	.169	.056
VAR00025	.184	.158	.126	-.074	1.000	-.181	.011	.178	-.170	.386	.046	.110	.199	-.048	.366	.217	-.204	-.086	.010	.306
VAR00026	-.116	.166	.097	.161	-.181	1.000	.023	.004	.093	-.071	-.114	-.163	.039	-.022	-.166	-.008	.099	-.124	.196	-.169
VAR00027	.114	.029	.088	.002	.011	.023	1.000	.648	.105	.406	.401	.180	-.006	.084	.132	.151	-.247	.107	-.102	.020
VAR00028	.166	.228	.136	.078	.178	.004	.648	1.000	.095	.514	.264	.266	.189	.126	.228	.176	-.192	.190	-.028	.042
VAR00029	.137	.331	.138	-.126	-.170	.093	.105	.095	1.000	.052	-.028	.326	.080	.323	.031	.209	-.006	.257	.290	.147
VAR00030	.562	.155	.171	.099	.386	-.071	.406	.514	.052	1.000	.290	.438	.356	.030	.356	.600	-.251	.255	.037	.279
VAR00031	.041	.113	-.082	.261	.046	-.114	.401	.264	-.028	.290	1.000	-.038	.110	-.019	.276	.173	-.235	-.087	-.109	.108
VAR00032	.468	.314	.523	.240	.110	-.163	.180	.266	.326	.438	-.038	1.000	.241	.139	.171	.452	-.133	.347	.324	.287
VAR00033	.303	.164	.078	.330	.199	.039	-.006	.189	.080	.356	.110	.241	1.000	-.105	.197	.327	.089	.254	.142	.159
VAR00034	-.036	.145	.054	.185	-.048	-.022	.084	.126	.323	.030	-.019	.139	-.105	1.000	.385	.163	-.163	.117	.029	.065
VAR00035	.268	.087	.147	.227	.366	-.166	.132	.228	.031	.356	.276	.171	.197	.385	1.000	.232	-.326	-.150	-.076	.271
VAR00036	.413	.198	.059	.128	.217	-.008	.151	.176	.209	.600	.173	.452	.327	.163	.232	1.000	-.099	.388	.190	.137
VAR00037	-.210	-.037	-.252	-.017	-.204	.099	-.247	-.192	-.006	-.251	-.235	-.133	.089	-.163	-.326	-.099	1.000	-.059	-.116	-.095
VAR00038	.261	-.081	-.075	.008	-.086	-.124	.107	.190	.257	.255	-.087	.347	.254	.117	-.150	.388	-.059	1.000	.336	-.075
VAR00039	.052	.152	.170	.169	.010	.196	-.102	-.028	.290	.037	-.109	.324	.142	.029	-.076	.190	-.116	.336	1.000	.053
VAR00040	.432	.201	.169	.056	.306	-.169	.020	.042	.147	.279	.108	.287	.159	.065	.271	.137	-.095	-.075	.053	1.000

The covariance matrix is calculated and used in the analysis.

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
104.18	118.559	10.888	20

Reliability: SEAI : Output: 82

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.891	75

Item Statistics

	Mean	Std. Deviation	N
SEAI	2.83	.376	60
VAR00002	2.63	.486	60
VAR00003	2.37	.712	60
VAR00004	2.32	.596	60
VAR00005	1.52	.676	60
VAR00006	2.22	.783	60
VAR00007	2.52	.596	60
VAR00008	2.17	.740	60
VAR00009	2.55	.502	60
VAR00010	2.05	.649	60
VAR00011	2.35	.481	60
VAR00012	2.38	.555	60
VAR00013	1.97	.486	60
VAR00014	2.57	.533	60
VAR00015	2.52	.567	60
VAR00016	2.70	.497	60
VAR00017	1.73	.607	60
VAR00018	2.23	.533	60
VAR00019	2.55	.594	60
VAR00020	2.12	.613	60
VAR00021	2.18	.567	60
VAR00022	2.28	.739	60
VAR00023	2.63	.520	60
VAR00024	2.57	.593	60
VAR00025	1.95	.769	60
VAR00026	2.28	.585	60
VAR00027	2.38	.555	60
VAR00028	2.63	.486	60
VAR00029	2.65	.515	60
VAR00030	2.30	.619	60
VAR00031	2.58	.530	60
VAR00032	1.35	.606	60
VAR00033	2.45	.534	60
VAR00034	2.22	.715	60
VAR00035	1.67	.681	60
VAR00036	2.35	.659	60

VAR00037	2.18	.567	60
VAR00038	2.38	.585	60
VAR00039	2.43	.563	60
VAR00040	1.80	.659	60
VAR00041	2.38	.555	60
VAR00042	2.70	.462	60
VAR00043	2.30	.619	60
VAR00044	2.40	.616	60
VAR00045	2.63	.551	60
VAR00046	2.33	.601	60
VAR00047	2.18	.854	60
VAR00048	2.40	.588	60
VAR00049	2.35	.633	60
VAR00050	2.30	.720	60
VAR00051	2.37	.610	60
VAR00052	2.23	.593	60
VAR00053	2.10	.706	60
VAR00054	2.47	.650	60
VAR00055	2.30	.619	60
VAR00056	2.27	.634	60
VAR00057	2.18	.624	60
VAR00058	2.55	.565	60
VAR00059	1.67	.752	60
VAR00060	2.30	.591	60
VAR00061	2.17	.493	60
VAR00062	2.42	.619	60
VAR00063	2.12	.666	60
VAR00064	2.23	.465	60
VAR00065	2.62	.524	60
VAR00066	2.25	.541	60
VAR00067	2.13	.503	60
VAR00068	2.32	.567	60
VAR00069	2.68	.469	60
VAR00070	2.03	.688	60
VAR00071	2.48	.537	60
VAR00072	2.08	.743	60
VAR00073	2.07	.548	60
VAR00074	2.15	.606	60
VAR00075	2.18	.676	60

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
171.92	225.773	15.026	75

RELIABILITY: SEAI: Split-Half

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Part 1	Value	.747
		N of Items	38(a)
	Part 2	Value	.842
		N of Items	37(b)
	Total N of Items		75
Correlation Between Forms			.811
Spearman-Brown Coefficient	Equal Length		.895
	Unequal Length		.895
Guttman Split-Half Coefficient			.884

a The items are: SEAI, VAR00002, VAR00003, VAR00004, VAR00005, VAR00006, VAR00007, VAR00008, VAR00009, VAR00010, VAR00011, VAR00012, VAR00013, VAR00014, VAR00015, VAR00016, VAR00017, VAR00018, VAR00019, VAR00020, VAR00021, VAR00022, VAR00023, VAR00024, VAR00025, VAR00026, VAR00027, VAR00028, VAR00029, VAR00030, VAR00031, VAR00032, VAR00033, VAR00034, VAR00035, VAR00036, VAR00037, VAR00038.

b The items are: VAR00039, VAR00040, VAR00041, VAR00042, VAR00043, VAR00044, VAR00045, VAR00046, VAR00047, VAR00048, VAR00049, VAR00050, VAR00051, VAR00052, VAR00053, VAR00054, VAR00055, VAR00056, VAR00057, VAR00058, VAR00059, VAR00060, VAR00061, VAR00062, VAR00063, VAR00064, VAR00065, VAR00066, VAR00067, VAR00068, VAR00069, VAR00070, VAR00071, VAR00072, VAR00073, VAR00074, VAR00075.

Item Statistics

	Mean	Std. Deviation	N
SEAI	2.83	.376	60
VAR00002	2.63	.486	60
VAR00003	2.37	.712	60
VAR00004	2.32	.596	60
VAR00005	1.52	.676	60
VAR00006	2.22	.783	60
VAR00007	2.52	.596	60
VAR00008	2.17	.740	60
VAR00009	2.55	.502	60
VAR00010	2.05	.649	60
VAR00011	2.35	.481	60
VAR00012	2.38	.555	60
VAR00013	1.97	.486	60
VAR00014	2.57	.533	60
VAR00015	2.52	.567	60
VAR00016	2.70	.497	60
VAR00017	1.73	.607	60
VAR00018	2.23	.533	60
VAR00019	2.55	.594	60
VAR00020	2.12	.613	60
VAR00021	2.18	.567	60
VAR00022	2.28	.739	60
VAR00023	2.63	.520	60
VAR00024	2.57	.593	60
VAR00025	1.95	.769	60
VAR00026	2.28	.585	60
VAR00027	2.38	.555	60
VAR00028	2.63	.486	60
VAR00029	2.65	.515	60
VAR00030	2.30	.619	60
VAR00031	2.58	.530	60
VAR00032	1.35	.606	60
VAR00033	2.45	.534	60
VAR00034	2.22	.715	60
VAR00035	1.67	.681	60
VAR00036	2.35	.659	60

VAR00037	2.18	.567	60
VAR00038	2.38	.585	60
VAR00039	2.43	.563	60
VAR00040	1.80	.659	60
VAR00041	2.38	.555	60
VAR00042	2.70	.462	60
VAR00043	2.30	.619	60
VAR00044	2.40	.616	60
VAR00045	2.63	.551	60
VAR00046	2.33	.601	60
VAR00047	2.18	.854	60
VAR00048	2.40	.588	60
VAR00049	2.35	.633	60
VAR00050	2.30	.720	60
VAR00051	2.37	.610	60
VAR00052	2.23	.593	60
VAR00053	2.10	.706	60
VAR00054	2.47	.650	60
VAR00055	2.30	.619	60
VAR00056	2.27	.634	60
VAR00057	2.18	.624	60
VAR00058	2.55	.565	60
VAR00059	1.67	.752	60
VAR00060	2.30	.591	60
VAR00061	2.17	.493	60
VAR00062	2.42	.619	60
VAR00063	2.12	.666	60
VAR00064	2.23	.465	60
VAR00065	2.62	.524	60
VAR00066	2.25	.541	60
VAR00067	2.13	.503	60
VAR00068	2.32	.567	60
VAR00069	2.68	.469	60
VAR00070	2.03	.688	60
VAR00071	2.48	.537	60
VAR00072	2.08	.743	60
VAR00073	2.07	.548	60
VAR00074	2.15	.606	60
VAR00075	2.18	.676	60

Scale Statistics

	Mean	Variance	Std. Deviation	N of Items
Part 1	87.33	49.548	7.039	38(a)
Part 2	84.58	76.451	8.744	37(b)
Both Parts	171.92	225.773	15.026	75

a The items are: SEAI, VAR00002, VAR00003, VAR00004, VAR00005, VAR00006, VAR00007, VAR00008, VAR00009, VAR00010, VAR00011, VAR00012, VAR00013, VAR00014, VAR00015, VAR00016, VAR00017, VAR00018, VAR00019, VAR00020, VAR00021, VAR00022, VAR00023, VAR00024, VAR00025, VAR00026, VAR00027, VAR00028, VAR00029, VAR00030, VAR00031, VAR00032, VAR00033, VAR00034, VAR00035, VAR00036, VAR00037, VAR00038.

b The items are: VAR00039, VAR00040, VAR00041, VAR00042, VAR00043, VAR00044, VAR00045, VAR00046, VAR00047, VAR00048, VAR00049, VAR00050, VAR00051, VAR00052, VAR00053, VAR00054, VAR00055, VAR00056, VAR00057, VAR00058, VAR00059, VAR00060, VAR00061, VAR00062, VAR00063, VAR00064, VAR00065, VAR00066, VAR00067, VAR00068, VAR00069, VAR00070, VAR00071, VAR00072, VAR00073, VAR00074, VAR00075.

RELIABILITY: LOC: Output: 83

Case Processing Summary

		N	%
Cases	Valid	70	100.0
	Excluded(a)	0	.0
	Total	70	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.634	23

Reliability: LOC: Split-Half

Case Processing Summary

		N	%
Cases	Valid	70	100.0
	Excluded(a)	0	.0
	Total	70	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Part 1	Value	.551
		N of Items	12(a)
	Part 2	Value	.383
		N of Items	11(b)
	Total N of Items		23
Correlation Between Forms			.424
Spearman-Brown Coefficient	Equal Length		.595
	Unequal Length		.596
Guttman Split-Half Coefficient			.585

a The items are: VAR00002, VAR00003, VAR00004, VAR00005, VAR00006, VAR00007, VAR00009, VAR00010, VAR00011, VAR00012, VAR00013, VAR00015.

b The items are: VAR00016, VAR00017, VAR00018, VAR00020, VAR00021, VAR00022, VAR00023, VAR00025, VAR00026, VAR00028, VAR00029.

APPENDICES

Reliability Statistics

Bem's Sex-Role Inventory

(BSRI Original): Hindi version

Cronbech alpha

Split- Half Reliability

BSRI: M-F Reliability

BSRI: Masculinity Reliability

BSRI: Feminity Reliability

Self-Actualization Inventory

(SEAI): English version

Cronbech Alpha

Split-Half Reliability

Locus Of Control Scale

(LOC Scale): English version

Cronbech Alpha

Split-Half Reliability.

Questionnaire (Hindi version)

Questionnaire (English version)

Reliability: BSRI Original: Output: 81. Cronbech's Alpha

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.865	.875	60

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
299.72	890.545	29.842	60

Reliability: BSRI Original: Split- Half Reliability:

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Part 1	Value	.725
		N of Items	30(a)
	Part 2	Value	.800
		N of Items	30(b)
	Total N of Items		60
Correlation Between Forms			.744
Spearman-Brown Coefficient	Equal Length		.853
	Unequal Length		.853
Guttman Split-Half Coefficient			.851

a The items are: VAR00001, VAR00002, VAR00003, VAR00004, VAR00005, VAR00006, VAR00007, VAR00008, VAR00009, VAR00010, VAR00011, VAR00012, VAR00013, VAR00014, VAR00015, VAR00016, VAR00017, VAR00018, VAR00019, VAR00020, VAR00021, VAR00022, VAR00023, VAR00024, VAR00025, VAR00026, VAR00027, VAR00028, VAR00029, VAR00030.

b The items are: VAR00031, VAR00032, VAR00033, VAR00034, VAR00035, VAR00036, VAR00037, VAR00038, VAR00039, VAR00040, VAR00041, VAR00042, VAR00043, VAR00044, VAR00045, VAR00046, VAR00047, VAR00048, VAR00049, VAR00050, VAR00051, VAR00052, VAR00053, VAR00054, VAR00055, VAR00056, VAR00057, VAR00058, VAR00059, VAR00060.

Scale Statistics

	Mean	Variance	Std. Deviation	N of Items
Part 1	148.37	233.423	15.278	30(a)
Part 2	151.35	278.130	16.677	30(b)
Both Parts	299.72	890.545	29.842	60

a The items are: VAR00001, VAR00002, VAR00003, VAR00004, VAR00005, VAR00006, VAR00007, VAR00008, VAR00009, VAR00010, VAR00011, VAR00012, VAR00013, VAR00014, VAR00015, VAR00016, VAR00017, VAR00018, VAR00019, VAR00020, VAR00021, VAR00022, VAR00023, VAR00024, VAR00025, VAR00026, VAR00027, VAR00028, VAR00029, VAR00030.

b The items are: VAR00031, VAR00032, VAR00033, VAR00034, VAR00035, VAR00036, VAR00037, VAR00038, VAR00039, VAR00040, VAR00041, VAR00042, VAR00043, VAR00044, VAR00045, VAR00046, VAR00047, VAR00048, VAR00049, VAR00050, VAR00051, VAR00052, VAR00053, VAR00054, VAR00055, VAR00056, VAR00057, VAR00058, VAR00059, VAR00060.

Reliability: Masculinity: BSRI: Output: 81

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.819	.826	20

Inter-Item Correlation Matrix

	Mas	VAR 00002	VAR 00003	VAR 00004	VAR 00005	VAR 00006	VAR 00007	VAR 00008	VAR 00009	VAR 00010	VAR 00011	VAR 00012	VAR 00013	VAR 00014	VAR 00015	VAR 00016	VAR 00017	VAR 00018	VAR 00019	VAR 00020
Mas	1.000	-.120	-.073	.215	.288	.126	-.261	.271	.149	.117	.123	.209	.134	-.141	.051	.216	.237	.123	.119	.377
VAR00002	-.120	1.000	-.022	.045	.110	-.068	.268	.081	.300	-.020	-.006	.262	-.005	.020	-.084	.192	-.033	.078	.306	-.181
VAR00003	-.073	-.022	1.000	.212	.336	.283	.381	.207	-.023	.189	.272	-.006	.158	.233	.396	.135	.019	-.148	.123	.200
VAR00004	.215	.045	.212	1.000	.446	.072	.158	.295	.149	-.082	.125	.162	.314	.161	.282	.475	.219	.130	.093	.165
VAR00005	.288	.110	.336	.446	1.000	.217	.124	.234	.169	.115	.154	.256	.099	.002	.226	.439	.044	.063	.127	.394
VAR00006	.126	-.068	.283	.072	.217	1.000	-.050	.122	.443	.083	.442	.063	.307	.388	.386	.189	.363	.195	-.114	.391
VAR00007	-.261	.268	.381	.158	.124	-.050	1.000	.178	-.004	.255	.113	.267	.235	.389	.153	.196	-.107	.003	.339	-.001
VAR00008	.271	.081	.207	.295	.234	.122	.178	1.000	.283	.104	.097	.199	.454	.210	.490	.277	.245	.263	.266	.271
VAR00009	.149	.300	-.023	.149	.169	.443	-.004	.283	1.000	-.129	.236	.216	.270	.320	.283	.143	.302	.358	.231	.101
VAR00010	.117	-.020	.189	-.082	.115	.083	.255	.104	-.129	1.000	.197	-.166	.297	.256	.041	.096	.251	.027	.177	.415
VAR00011	.123	-.006	.272	.125	.154	.442	.113	.097	.236	.197	1.000	.201	.372	.472	.255	.221	.607	.235	.109	.327
VAR00012	.209	.262	-.006	.162	.256	.063	.267	.199	.216	-.166	.201	1.000	.085	.135	.272	.100	.182	.139	.331	-.030
VAR00013	.134	-.005	.158	.314	.099	.307	.235	.454	.270	.297	.372	.085	1.000	.713	.353	.266	.436	.419	.198	.271
VAR00014	-.141	.020	.233	.161	.002	.388	.389	.210	.320	.256	.472	.135	.713	1.000	.386	.073	.386	.445	.245	.158
VAR00015	.051	-.084	.396	.282	.226	.386	.153	.490	.283	.041	.255	.272	.353	.386	1.000	.300	.176	.221	.297	.293
VAR00016	.216	.192	.135	.475	.439	.189	.196	.277	.143	.096	.221	.100	.266	.073	.300	1.000	.271	.256	.297	.182
VAR00017	.237	-.033	.019	.219	.044	.363	-.107	.245	.302	.251	.607	.182	.436	.386	.176	.271	1.000	.392	.155	.271
VAR00018	.123	.078	-.148	.130	.063	.195	.003	.263	.358	.027	.235	.139	.419	.445	.221	.256	.392	1.000	.189	.270
VAR00019	.119	.306	.123	.093	.127	-.114	.339	.266	.231	.177	.109	.331	.198	.245	.297	.297	.155	.189	1.000	-.061
VAR00020	.377	-.181	.200	.165	.394	.391	-.001	.271	.101	.415	.327	-.030	.271	.158	.293	.182	.271	.270	-.061	1.000

The covariance matrix is calculated and used in the analysis.

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
97.55	228.387	15.112	20

Reliability: Feminity

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.687	.732	20

	Fem	VAR 00022	VAR 00023	VAR 00024	VAR 00025	VAR 00026	VAR 00027	VAR 00028	VAR 00029	VAR 00030	VAR 00031	VAR 00032	VAR 00033	VAR 00034	VAR 00035	VAR 00036	VAR 00037	VAR 00038	VAR 00039	VAR 00040
Fem	1.000	.015	.107	.124	.184	-.116	.114	.166	.137	.562	.041	.468	.303	-.036	.268	.413	-.210	.261	.052	.432
VAR00022	.015	1.000	.430	.299	.158	.166	.029	.228	.331	.155	.113	.314	.164	.145	.087	.198	-.037	-.081	.152	.201
VAR00023	.107	.430	1.000	.335	.126	.097	.088	.136	.138	.171	-.082	.523	.078	.054	.147	.059	-.252	-.075	.170	.169
VAR00024	.124	.299	.335	1.000	-.074	.161	.002	.078	-.126	.099	.261	.240	.330	.185	.227	.128	-.017	.008	.169	.056
VAR00025	.184	.158	.126	-.074	1.000	-.181	.011	.178	-.170	.386	.046	.110	.199	-.048	.366	.217	-.204	-.086	.010	.306
VAR00026	-.116	.166	.097	.161	-.181	1.000	.023	.004	.093	-.071	-.114	-.163	.039	-.022	-.166	-.008	.099	-.124	.196	-.169
VAR00027	.114	.029	.088	.002	.011	.023	1.000	.648	.105	.406	.401	.180	-.006	.084	.132	.151	-.247	.107	-.102	.020
VAR00028	.166	.228	.136	.078	.178	.004	.648	1.000	.095	.514	.264	.266	.189	.126	.228	.176	-.192	.190	-.028	.042
VAR00029	.137	.331	.138	-.126	-.170	.093	.105	.095	1.000	.052	-.028	.326	.080	.323	.031	.209	-.006	.257	.290	.147
VAR00030	.562	.155	.171	.099	.386	-.071	.406	.514	.052	1.000	.290	.438	.356	.030	.356	.600	-.251	.255	.037	.279
VAR00031	.041	.113	-.082	.261	.046	-.114	.401	.264	-.028	.290	1.000	-.038	.110	-.019	.276	.173	-.235	-.087	-.109	.108
VAR00032	.468	.314	.523	.240	.110	-.163	.180	.266	.326	.438	-.038	1.000	.241	.139	.171	.452	-.133	.347	.324	.287
VAR00033	.303	.164	.078	.330	.199	.039	-.006	.189	.080	.356	.110	.241	1.000	-.105	.197	.327	.089	.254	.142	.159
VAR00034	-.036	.145	.054	.185	-.048	-.022	.084	.126	.323	.030	-.019	.139	-.105	1.000	.385	.163	-.163	.117	.029	.065
VAR00035	.268	.087	.147	.227	.366	-.166	.132	.228	.031	.356	.276	.171	.197	.385	1.000	.232	-.326	-.150	-.076	.271
VAR00036	.413	.198	.059	.128	.217	-.008	.151	.176	.209	.600	.173	.452	.327	.163	.232	1.000	-.099	.388	.190	.137
VAR00037	-.210	-.037	-.252	-.017	-.204	.099	-.247	-.192	-.006	-.251	-.235	-.133	.089	-.163	-.326	-.099	1.000	-.059	-.116	-.095
VAR00038	.261	-.081	-.075	.008	-.086	-.124	.107	.190	.257	.255	-.087	.347	.254	.117	-.150	.388	-.059	1.000	.336	-.075
VAR00039	.052	.152	.170	.169	.010	.196	-.102	-.028	.290	.037	-.109	.324	.142	.029	-.076	.190	-.116	.336	1.000	.053
VAR00040	.432	.201	.169	.056	.306	-.169	.020	.042	.147	.279	.108	.287	.159	.065	.271	.137	-.095	-.075	.053	1.000

The covariance matrix is calculated and used in the analysis.

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
104.18	118.559	10.888	20

Reliability: SEAI : Output: 82

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.891	75

Item Statistics

	Mean	Std. Deviation	N
SEAI	2.83	.376	60
VAR00002	2.63	.486	60
VAR00003	2.37	.712	60
VAR00004	2.32	.596	60
VAR00005	1.52	.676	60
VAR00006	2.22	.783	60
VAR00007	2.52	.596	60
VAR00008	2.17	.740	60
VAR00009	2.55	.502	60
VAR00010	2.05	.649	60
VAR00011	2.35	.481	60
VAR00012	2.38	.555	60
VAR00013	1.97	.486	60
VAR00014	2.57	.533	60
VAR00015	2.52	.567	60
VAR00016	2.70	.497	60
VAR00017	1.73	.607	60
VAR00018	2.23	.533	60
VAR00019	2.55	.594	60
VAR00020	2.12	.613	60
VAR00021	2.18	.567	60
VAR00022	2.28	.739	60
VAR00023	2.63	.520	60
VAR00024	2.57	.593	60
VAR00025	1.95	.769	60
VAR00026	2.28	.585	60
VAR00027	2.38	.555	60
VAR00028	2.63	.486	60
VAR00029	2.65	.515	60
VAR00030	2.30	.619	60
VAR00031	2.58	.530	60
VAR00032	1.35	.606	60
VAR00033	2.45	.534	60
VAR00034	2.22	.715	60
VAR00035	1.67	.681	60
VAR00036	2.35	.659	60

VAR00037	2.18	.567	60
VAR00038	2.38	.585	60
VAR00039	2.43	.563	60
VAR00040	1.80	.659	60
VAR00041	2.38	.555	60
VAR00042	2.70	.462	60
VAR00043	2.30	.619	60
VAR00044	2.40	.616	60
VAR00045	2.63	.551	60
VAR00046	2.33	.601	60
VAR00047	2.18	.854	60
VAR00048	2.40	.588	60
VAR00049	2.35	.633	60
VAR00050	2.30	.720	60
VAR00051	2.37	.610	60
VAR00052	2.23	.593	60
VAR00053	2.10	.706	60
VAR00054	2.47	.650	60
VAR00055	2.30	.619	60
VAR00056	2.27	.634	60
VAR00057	2.18	.624	60
VAR00058	2.55	.565	60
VAR00059	1.67	.752	60
VAR00060	2.30	.591	60
VAR00061	2.17	.493	60
VAR00062	2.42	.619	60
VAR00063	2.12	.666	60
VAR00064	2.23	.465	60
VAR00065	2.62	.524	60
VAR00066	2.25	.541	60
VAR00067	2.13	.503	60
VAR00068	2.32	.567	60
VAR00069	2.68	.469	60
VAR00070	2.03	.688	60
VAR00071	2.48	.537	60
VAR00072	2.08	.743	60
VAR00073	2.07	.548	60
VAR00074	2.15	.606	60
VAR00075	2.18	.676	60

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
171.92	225.773	15.026	75

RELIABILITY: SEAI: Split-Half

Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Excluded(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Part 1	Value	.747
		N of Items	38(a)
	Part 2	Value	.842
		N of Items	37(b)
	Total N of Items		75
Correlation Between Forms			.811
Spearman-Brown Coefficient	Equal Length		.895
	Unequal Length		.895
Guttman Split-Half Coefficient			.884

a The items are: SEAI, VAR00002, VAR00003, VAR00004, VAR00005, VAR00006, VAR00007, VAR00008, VAR00009, VAR00010, VAR00011, VAR00012, VAR00013, VAR00014, VAR00015, VAR00016, VAR00017, VAR00018, VAR00019, VAR00020, VAR00021, VAR00022, VAR00023, VAR00024, VAR00025, VAR00026, VAR00027, VAR00028, VAR00029, VAR00030, VAR00031, VAR00032, VAR00033, VAR00034, VAR00035, VAR00036, VAR00037, VAR00038.

b The items are: VAR00039, VAR00040, VAR00041, VAR00042, VAR00043, VAR00044, VAR00045, VAR00046, VAR00047, VAR00048, VAR00049, VAR00050, VAR00051, VAR00052, VAR00053, VAR00054, VAR00055, VAR00056, VAR00057, VAR00058, VAR00059, VAR00060, VAR00061, VAR00062, VAR00063, VAR00064, VAR00065, VAR00066, VAR00067, VAR00068, VAR00069, VAR00070, VAR00071, VAR00072, VAR00073, VAR00074, VAR00075.

Item Statistics

	Mean	Std. Deviation	N
SEAI	2.83	.376	60
VAR00002	2.63	.486	60
VAR00003	2.37	.712	60
VAR00004	2.32	.596	60
VAR00005	1.52	.676	60
VAR00006	2.22	.783	60
VAR00007	2.52	.596	60
VAR00008	2.17	.740	60
VAR00009	2.55	.502	60
VAR00010	2.05	.649	60
VAR00011	2.35	.481	60
VAR00012	2.38	.555	60
VAR00013	1.97	.486	60
VAR00014	2.57	.533	60
VAR00015	2.52	.567	60
VAR00016	2.70	.497	60
VAR00017	1.73	.607	60
VAR00018	2.23	.533	60
VAR00019	2.55	.594	60
VAR00020	2.12	.613	60
VAR00021	2.18	.567	60
VAR00022	2.28	.739	60
VAR00023	2.63	.520	60
VAR00024	2.57	.593	60
VAR00025	1.95	.769	60
VAR00026	2.28	.585	60
VAR00027	2.38	.555	60
VAR00028	2.63	.486	60
VAR00029	2.65	.515	60
VAR00030	2.30	.619	60
VAR00031	2.58	.530	60
VAR00032	1.35	.606	60
VAR00033	2.45	.534	60
VAR00034	2.22	.715	60
VAR00035	1.67	.681	60
VAR00036	2.35	.659	60

VAR00037	2.18	.567	60
VAR00038	2.38	.585	60
VAR00039	2.43	.563	60
VAR00040	1.80	.659	60
VAR00041	2.38	.555	60
VAR00042	2.70	.462	60
VAR00043	2.30	.619	60
VAR00044	2.40	.616	60
VAR00045	2.63	.551	60
VAR00046	2.33	.601	60
VAR00047	2.18	.854	60
VAR00048	2.40	.588	60
VAR00049	2.35	.633	60
VAR00050	2.30	.720	60
VAR00051	2.37	.610	60
VAR00052	2.23	.593	60
VAR00053	2.10	.706	60
VAR00054	2.47	.650	60
VAR00055	2.30	.619	60
VAR00056	2.27	.634	60
VAR00057	2.18	.624	60
VAR00058	2.55	.565	60
VAR00059	1.67	.752	60
VAR00060	2.30	.591	60
VAR00061	2.17	.493	60
VAR00062	2.42	.619	60
VAR00063	2.12	.666	60
VAR00064	2.23	.465	60
VAR00065	2.62	.524	60
VAR00066	2.25	.541	60
VAR00067	2.13	.503	60
VAR00068	2.32	.567	60
VAR00069	2.68	.469	60
VAR00070	2.03	.688	60
VAR00071	2.48	.537	60
VAR00072	2.08	.743	60
VAR00073	2.07	.548	60
VAR00074	2.15	.606	60
VAR00075	2.18	.676	60

Scale Statistics

	Mean	Variance	Std. Deviation	N of Items
Part 1	87.33	49.548	7.039	38(a)
Part 2	84.58	76.451	8.744	37(b)
Both Parts	171.92	225.773	15.026	75

a The items are: SEAI, VAR00002, VAR00003, VAR00004, VAR00005, VAR00006, VAR00007, VAR00008, VAR00009, VAR00010, VAR00011, VAR00012, VAR00013, VAR00014, VAR00015, VAR00016, VAR00017, VAR00018, VAR00019, VAR00020, VAR00021, VAR00022, VAR00023, VAR00024, VAR00025, VAR00026, VAR00027, VAR00028, VAR00029, VAR00030, VAR00031, VAR00032, VAR00033, VAR00034, VAR00035, VAR00036, VAR00037, VAR00038.

b The items are: VAR00039, VAR00040, VAR00041, VAR00042, VAR00043, VAR00044, VAR00045, VAR00046, VAR00047, VAR00048, VAR00049, VAR00050, VAR00051, VAR00052, VAR00053, VAR00054, VAR00055, VAR00056, VAR00057, VAR00058, VAR00059, VAR00060, VAR00061, VAR00062, VAR00063, VAR00064, VAR00065, VAR00066, VAR00067, VAR00068, VAR00069, VAR00070, VAR00071, VAR00072, VAR00073, VAR00074, VAR00075.

RELIABILITY: LOC: Output: 83

Case Processing Summary

		N	%
Cases	Valid	70	100.0
	Excluded(a)	0	.0
	Total	70	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.634	23

Reliability: LOC: Split-Half

Case Processing Summary

		N	%
Cases	Valid	70	100.0
	Excluded(a)	0	.0
	Total	70	100.0

a Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Part 1	Value	.551
		N of Items	12(a)
	Part 2	Value	.383
		N of Items	11(b)
	Total N of Items		23
Correlation Between Forms			.424
Spearman-Brown Coefficient	Equal Length		.595
	Unequal Length		.596
Guttman Split-Half Coefficient			.585

a The items are: VAR00002, VAR00003, VAR00004, VAR00005, VAR00006, VAR00007, VAR00009, VAR00010, VAR00011, VAR00012, VAR00013, VAR00015.

b The items are: VAR00016, VAR00017, VAR00018, VAR00020, VAR00021, VAR00022, VAR00023, VAR00025, VAR00026, VAR00028, VAR00029.